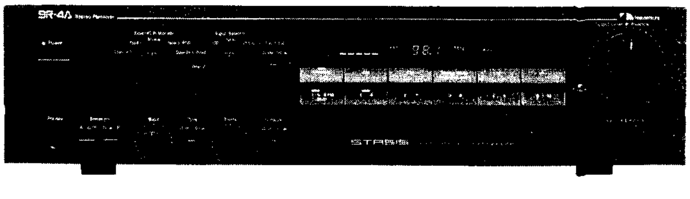
128

Nakamichi

# Service Manual

# Nakamichi
# SR-4
# SR-4A

## Stereo Receiver



128

## CONTENTS

**1. General** . . . . . . . . . . 1
**2. Parts Location for Electrical Adjustment** . . . . . . . . . . 3
**3. Electrical Adjustments** . . . . . . . . . . 4
  3. 1. Power Amplifier Section . . . . . . . . . . 4
  3. 2. Tuner Section . . . . . . . . . . 4
**4. Mechanism Ass'y and Parts List** . . . . . . . . . . 7
  4. 1. Synthesis . . . . . . . . . . 7
  4. 2. Front Panel Ass'y (A01) . . . . . . . . . . 8
  4. 3. Chassis Ass'y (A02) . . . . . . . . . . 9
  4. 4. Rear Panel Ass'y (B01) . . . . . . . . . . 11
**5. Mounting Diagrams and Parts List** . . . . . . . . . . 12
  5. 1. Power Switch P.C.B. Ass'y . . . . . . . . . . 12
  5. 2. AC Outlet P.C.B. Ass'y . . . . . . . . . . 12
  5. 3. Power Indicator P.C.B. Ass'y . . . . . . . . . . 12
  5. 4. Pin Jack P.C.B. Ass'y . . . . . . . . . . 12
  5. 5. IF Band Selector P.C.B. Ass'y . . . . . . . . . . 13
  5. 6. MM/MC Switch P.C.B. Ass'y . . . . . . . . . . 13
  5. 7. Speaker Switch P.C.B. Ass'y . . . . . . . . . . 13
  5. 8. Loudness Volume P.C.B. Ass'y . . . . . . . . . . 13
  5. 9. Volume Motor P.C.B. Ass'y . . . . . . . . . . 13
  5. 10. Speaker Terminal P.C.B. Ass'y . . . . . . . . . . 14
  5. 11. Tone Control P.C.B. Ass'y . . . . . . . . . . 14
  5. 12. Fuse P.C.B. Ass'y . . . . . . . . . . 15
  5. 13. Video Amp. P.C.B. Ass'y . . . . . . . . . . 15
  5. 14. Control Switch P.C.B. Ass'y . . . . . . . . . . 17
  5. 15. Display P.C.B. Ass'y . . . . . . . . . . 18
  5. 16. Power Supply P.C.B. Ass'y . . . . . . . . . . 19
  5. 17. Logic P.C.B. Ass'y . . . . . . . . . . 21
  5. 18. Tuner P.C.B. Ass'y . . . . . . . . . . 24
  5. 19. Main P.C.B. Ass'y . . . . . . . . . . 27
**6. Schematic Diagrams** . . . . . . . . . . 31
  6. 1. IC Block Diagrams . . . . . . . . . . 31
  6. 2. Schematic Diagrams . . . . . . . . . . 33
    6.2.1. Amplifier Section . . . . . . . . . . 33
    6.2.2. Tuner and Power Supply Section . . . . . . . . . . 34
**7. Wiring Diagram** . . . . . . . . . . 37
**8. Block Diagrams** . . . . . . . . . . 38
  8. 1. Tuner Section . . . . . . . . . . 38
  8. 2. Amplifier Section . . . . . . . . . . 39
**9. Specifications** . . . . . . . . . . 40

## 1. GENERAL

### 1.1. Voltage Selector

Voltage selector is installed on the rear panel for Other version of the Nakamichi SR-4.
This voltage selector can select either 110 V, 120 V, 220 V or 240 V at customer's disposal.

| Schematic Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|
| | **FA03581A** | **Package Ass'y (SR-4A)** | 1 |
| | **FA03582A** | **Package Ass'y (SR-4 (Canada))** | 1 |
| | **FA03584A** | **Package Ass'y (SR-4 (Australia))** | 1 |
| | **FA03583A** | **Package Ass'y (SR-4 (Other))** | 1 |
| 01 | 0F04022A | Carton Box (SR-4A) | 1 |
| | 0F04024A | Carton Box (SR-4) | 1 |
| 02 | 0F04041A | Packing L | 1 |
| 03 | 0F04042A | Packing R | 1 |
| 04 | 0F03670A | Poly-Sheet | 1 |
| — | 0M03457A | Voltage Seal 240V (SR-4 (Australia)) | 1 |
| — | 0M03456A | Voltage Seal 220V (SR-4 (Other)) | 1 |
| | **DA04037A** | **Accessory Ass'y (SR-4A)** | 1 |
| | **DA04038A** | **Accessory Ass'y (SR-4 (Canada))** | 1 |
| | **DA04040A** | **Accessory Ass'y (SR-4 (Australia))** | 1 |
| | **DA04039A** | **Accessory Ass'y (SR-4 (Other))** | 1 |
| 01 | 0B90070A | AM Loop Antenna Holder | 1 |
| 02 | 0B90081A | Feeder Antenna | 1 |
| 03 | 0B90194A | Antenna Adapter F | 1 |
| 04 | 0B90198A | AM Loop Antenna | 1 |
| 05 | 0B90242A | Battery | 1 |
| 06 | DA04042A | Remote Control Unit | 1 |
| — | 0D03092B | Poly-Bag 320x340x0.08 | 1 |
| — | 0D04449A | Important Notice Card | 1 |
| — | 0D04651B | Owner's Manual SR-4/3/2 (English) | 1 |
| — | 0D04764A | Owner's Manual SR-4E/3E/2E, SR-4/3/2 (English/German/French) | 1 |
| — | 0D04673B | French Text (SR-4/3/2 (Canada)) | 1 |
| — | 0D04674B | Owner's Manual Text (SR-4/3/2 (Australia)) | 1 |
| — | 0D04675B | Owner's Manual Text (SR-4/3/2 (Other)) | 1 |
| — | DA03873A | Warranty Card Ass'y (SR-4A) | 1 |
| — | 0F04043A | Poly-Bag 80x150 | 1 |
| — | 0D04766A | Catalogue U.S.A. (SR-4A) | 1 |

### 1.2. Package Ass'y and Parts List

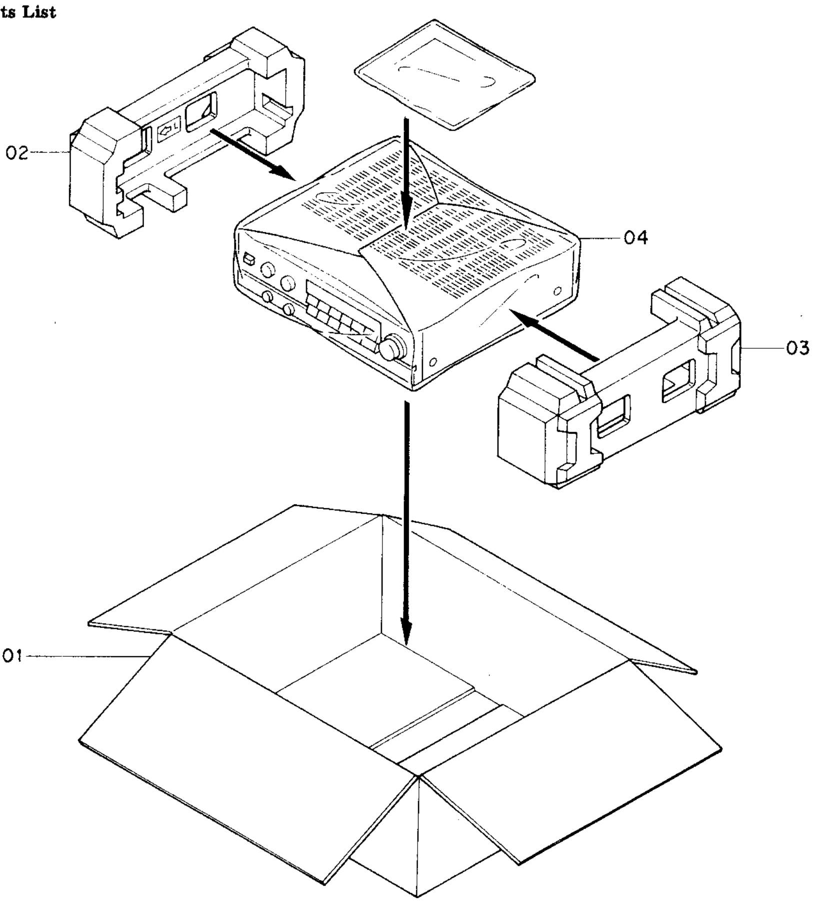
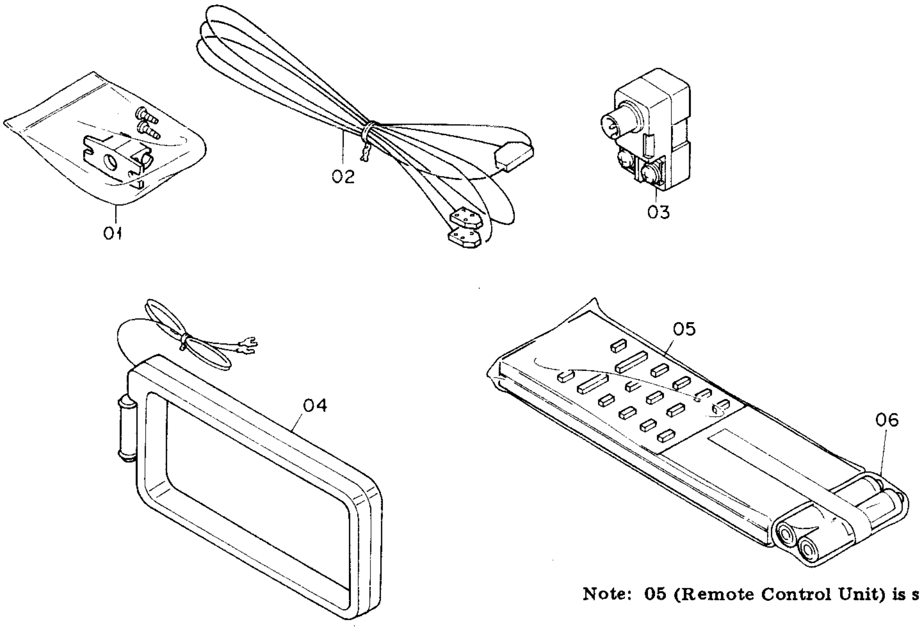


Fig. 1.1

### 1.3. Accessory Ass'y and Parts List


01
02
03
04
05
06

Note: 05 (Remote Control Unit) is supplied in unit form.

Fig. 1.2

## 2. PARTS LOCATION FOR ELECTRICAL ADJUSTMENT

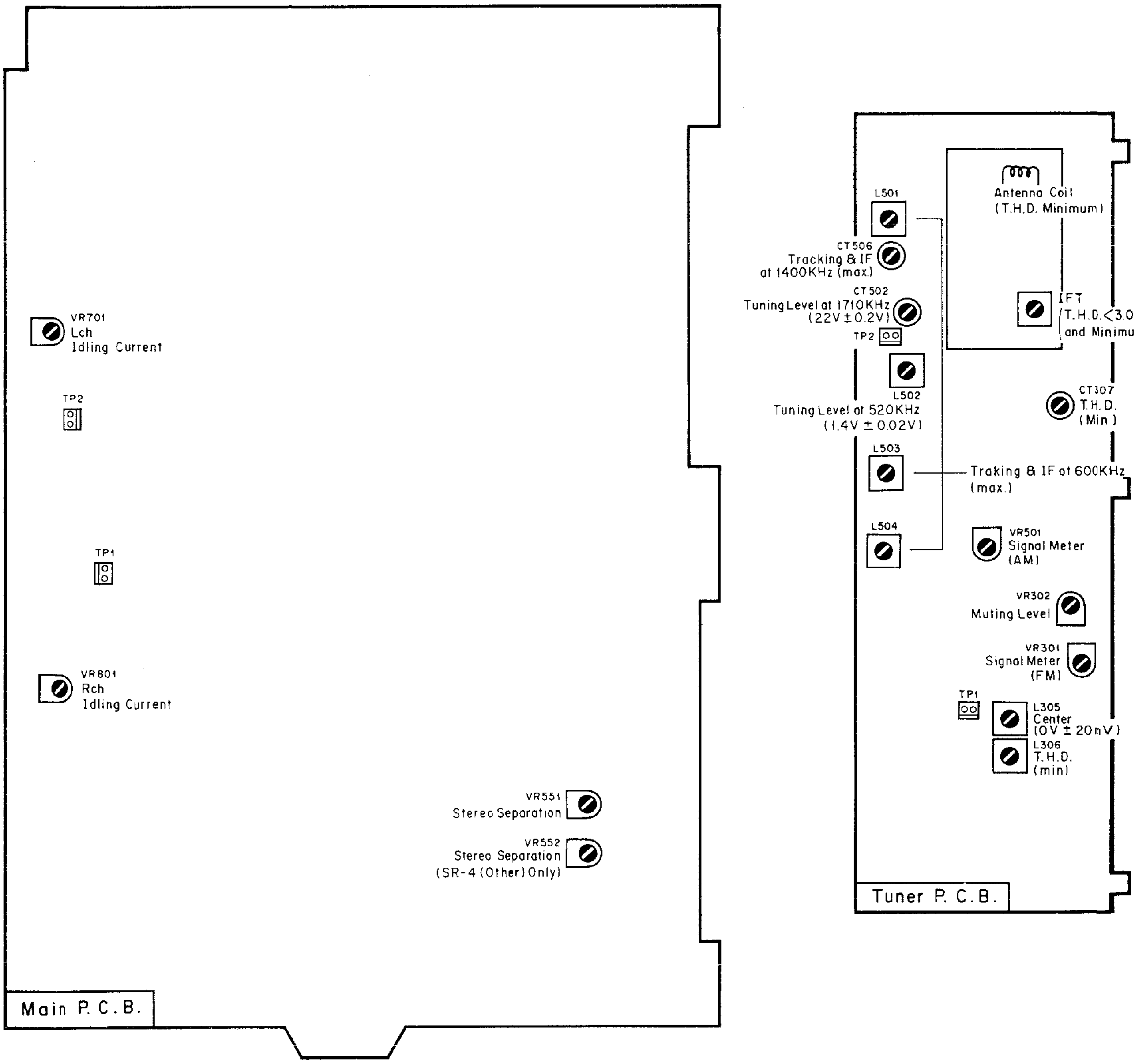

VR701
Lch
Idling Current
TP2
TP1
VR801
Rch
Idling Current
VR551
Stereo Separation
VR552
Stereo Separation
(SR-4 (Other) Only)
Main P. C. B.
L501
Antenna Coil
(T.H.D. Minimum)
CT506
Tracking & IF
at 1400KHz (max.)
CT502
Tuning Level at 1710KHz
(22V ± 0.2V)
IFT
(T.H.D.<3.0%
and Minimum)
TP2
L502
Tuning Level at 520KHz
(1.4V ± 0.02V)
CT307
T.H.D.
(Min)
L503
Traking & IF at 600KHz
(max.)
L504
VR501
Signal Meter
(AM)
VR302
Muting Level
VR301
Signal Meter
(FM)
TP1
L305
Center
(0V ± 20nV)
L306
T.H.D.
(min)
Tuner P. C. B.

Fig. 2

# 3. ELECTRICAL ADJUSTMENTS

## 3.1. Power Amplifier Section

| STEP | ITEM | SIGNAL SOURCE | OUTPUT CONNECTION | MODE | ADJUSTMENT | REMARKS |
|---|---|---|---|---|---|---|
| 1 | Idling Current | None | DC Voltmeter between TP2-1 & 2 and TP1-1 & 2 on Main P.C.B. | Input Selector - CD or Aux<br>Output Level - Min.<br>Speaker Selector A/B - OFF | Main P.C.B.<br>VR701<br>VR801 | 1. Insert shorting plugs into the CD Player Input Jacks.<br>2. Turn ON the power and allow 3 minutes before adjustment. (Top Cover must be installed before adjustment).<br>3. Adjust VR701 (VR801) to obtain 23 mV ±1 mV on the DC voltmeter. |

## 3.2. Tuner Section

Note: Adjustment should be made in a shielded room in principle.

### 3.2.1. FM Tuner Section

| STEP | ITEM | OUTPUT CONNECTION | MODE | ADJUSTMENT | REMARKS |
|---|---|---|---|---|---|
| 1 | Preliminary Step | See Fig. 3.1 | Stereo Receiver<br>Input Selector - Tuner<br>Band Selector - FM<br>Tape Monitor - Source<br>Signal Generator<br>Freq. - 98 MHz<br>RF Level - 65 dBf<br>Modulation - See REMARKS | | 1. Set the Stereo Receiver as indicated in the MODE.<br>2. Adjustment and confirmation should be made after tuning in to the set carrier frequency of the Signal Generator.<br>Note: Contents of modulation<br>1. For U.S.A., Canada & Other (Wide)<br>o Stereo<br>Audio: 1 kHz, 91%<br>Pilot: 19 kHz, 9%<br>o Mono<br>Audio: 1 kHz, 100%<br>2. For Australia & Other (Narrow)<br>o Stereo<br>Audio: 1 kHz, 51%<br>Pilot: 19 kHz, 9%<br>o Mono<br>Audio: 1 kHz, 60% |
| 2 | Usable Sensitivity Adjustment | Distortion Meter to Tape 1 Record Output Jacks | Stereo Receiver<br>Same as above<br>Signal Generator<br>Freq. - 98 MHz<br>RF Level - 12 dBf<br>Modulation - Mono | Tuner P.C.B.<br>Front-end<br>IFT<br>Antenna Coil (See Fig. 2) | 1. Set the Stereo Receiver to Manual mode by pressing the Tuning Mode button.<br>2. Adjust the IFT to obtain minimum distortion (total harmonic distortion (THD): 3% or less).<br>3. Adjust the distance between windings of antenna coil to obtain minimum distortion.<br>4. Set the frequency of the Signal Generator to 90 MHz/106 MHz and check that the THD is 3% or less. |

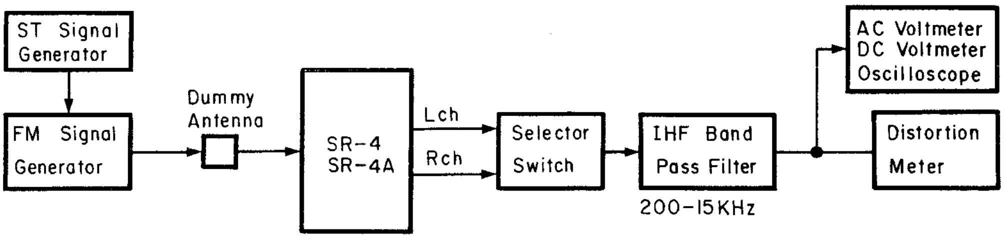


Fig. 3.1

| STEP | ITEM | OUTPUT CONNECTION | MODE | ADJUST-MENT | REMARKS |
|---|---|---|---|---|---|
| 3 | Center Voltage and THD Adjustment | DC Voltmeter between TP1-1 & TP1-2 on Tuner P.C.B. and Distortion Meter to Tape 1 Record Jacks | Stereo Receiver Same as above<br>Signal Generator<br>Freq. - 98 MHz<br>RF Level - 65 dBf<br>Modulation - Mono | Tuner P.C.B.<br>L305<br>L306 | 1. Set the Stereo Receiver to Manual mode.<br>2. Adjust L305 so that the reading on the DC voltmeter is 0 V ±20 mV.<br>3. Adjust L306 to obtain minimum distortion (THD: 0.07% or less).<br>Repeat 2 and 3, if necessary. |
| 4 | Muting Level Adjustment | Oscilloscope to Tape 1 Record Output Jacks | Stereo Receiver Same as above<br>Signal Generator<br>Freq. - 98 MHz<br>RF Level - 29 dBf<br>Modulation - Stereo | Tuner P.C.B.<br>VR302 | 1. Set the Stereo Receiver to Auto mode.<br>2. Rotate VR302 fully counterclockwise. Then, return it clockwise gradually until a waveform appears on the oscilloscope.<br>3. Decrease the RF level of the Signal Generator until the waveform on the oscilloscope disappears. Then increase the RF level gradually until a waveform appears again. At this point, check that the RF level of the Signal Generator is 29 dBf ±3 dB. |
| 5 | Signal Strength Meter Level Adjustment | None | Stereo Receiver Same as above<br>Signal Generator<br>Freq. - 98 MHz<br>RF Level - 56 dBf<br>Modulation - Stereo | Tuner P.C.B.<br>VR301 | 1. Set the Stereo Receiver to Auto mode.<br>2. Adjust VR301 so that all segments (1-5) of the signal strength meter light up.<br>3. Decrease the RF level of the Signal Generator to distinguish the segment 5. Next, increase the RF level gradually so that the segment 5 starts illuminating. At this point, check that the RF level of the Signal Generator is 56 dBf ±2 dB. |
| 6 | Stereo Separation Adjustment | AC Voltmeter to Tape 1 Record Output Jacks | Stereo Receiver Same as above<br>Signal Generator<br>Freq. - 98 MHz<br>RF Level - 65 dBf<br>Modulation - L or R only | Main P.C.B.<br>VR551<br>Main P.C.B.<br>VR552<br>(Other only) | For U.S.A., Canada & Australia versions:<br>1. Set the Stereo Receiver to Auto mode.<br>2. Apply modulation to only L channel.<br>3. Adjust VR551 to obtain minimum reading on the AC voltmeter at the R channel output jack.<br>4. Apply modulation to only R channel.<br>5. Check that the reading on the AC voltmeter at the L channel output jack is within ±1 dB with respect to the reading in 3.<br>If not, repeat 2 through 4.<br>For Other version:<br>1. Set the switches on the rear panel as follows:<br>Freq. Step FM/AM - 100 kHz/10 kHz<br>IF Band - Wide<br>2. Adjust VR551 by applying the same procedures as mentioned above.<br>3. Set the switches as follows:<br>Freq. Step FM/AM - 50 kHz/9 kHz<br>IF Band - Narrow<br>4. Apply the same procedures as mentioned above, except for VR552. |

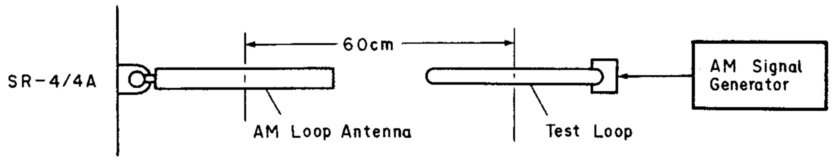


Fig. 3.2

| STEP | ITEM | OUTPUT CONNECTION | MODE | ADJUST-MENT | REMARKS |
|---|---|---|---|---|---|
| 7 | Stereo/Mono Selection Check and THD Adjustment | | Stereo Receiver<br>Same as above<br>Signal Generator<br>Freq. - 98 MHz<br>RF Level - 65 dBf<br>Modulation - Stereo/ Mono | Main P.C.B.<br>CT332 | 1. Set the Stereo Generator to L=-R mode.<br>2. Set the Stereo Receiver to Manual mode and check that the Stereo indicator goes out and stereo outputs disappear.<br>3. Set the Stereo Receiver to Auto mode and adjust CT332 to obtain minimum distortion (THD: 0.09% or less). |

**3.2.2. AM Tuner Section**

| STEP | ITEM | OUTPUT CONNECTION | MODE | ADJUST-MENT | REMARKS |
|---|---|---|---|---|---|
| 1 | Tuning Level Adjustment | DC Voltmeter between TP2-1 and TP2-2 on Tuner P.C.B. | Stereo Receiver<br>Input Selector - Tuner<br>Band Selector - AM<br>Tape Monitor - Source<br>Signal Generator<br>Freq. - 520 (522) kHz/ 1710 (1611) kHz | Tuner P.C.B.<br>L502<br>CT502 | 1. Set the frequency of the Signal Generator to 520 kHz (522 kHz for Australia and Other (Narrow)) and make tuning.<br>2. Adjust L502 to obtain 1.4 V ±0.02 V on the DC voltmeter.<br>3. Change the frequency to 1710 kHz (1611 kHz) and make tuning.<br>4. Adjust CT502 to obtain 22 V ±0.2 V on the DC voltmeter.<br>5. If satisfactory results are not obtained, repeat 1 through 4. |
| 2 | Tracking and IF Adjustment | AC Voltmeter to Tape 1 Record Output Jacks | Stereo Generator<br>Same as above<br>Signal Generator<br>Freq. - 600 (603) kHz/ 1400 (1404) kHz<br>RF Level - 82 dBμ/m<br>Modulation - 400 Hz, 30% | Tuner P.C.B.<br>L501<br>L503<br>L504<br>CT506 | 1. Set the measurement instruments as shown in Fig. 3.2. Set the distance between the AM Loop Antenna of the SR-4/SR-4A and a test loop to 60 cm. To obtain 56 dBμ/m at the AM Loop Antenna, set the RF level output of the AM Signal Generator to 82 dBμ/m as loss is 26 dBμ/m in this setting.<br>2. Set the frequency of the Signal Generator to 600 kHz (630 kHz for Australia and Other (Narrow)) and make tuning.<br>3. Adjust L501 to obtain maximum reading on the AC voltmeter.<br>4. Adjust L503 to obtain maximum reading on the AC voltmeter.<br>5. Adjust L504 to obtain maximum reading on the AC voltmeter.<br>6. Set the frequency to 1400 kHz (1404 kHz) and make tuning.<br>7. Adjust CT506 to obtain maximum reading on the AC voltmeter.<br>8. Repeat 2 through 7 once. |
| 3 | Signal Strength Meter Level Adjustment | None | Stereo Generator<br>Same as above<br>Signal Generator<br>Freq. - 1000 (999) kHz<br>RF Level - 104 dBμ/m | Tuner P.C.B.<br>VR501 | 1. With the same setting as in Step 2, set the RF level output of the AM Signal Generator to 104 dBμ/m in order to obtain 78 dBμ/m at the AM Loop Antenna.<br>2. Set the frequency of the Signal Generator to 1000 kHz (999 kHz for Australia and Other (Narrow)) and make tuning.<br>3. Adjust VR501 so that the segment 5 of the signal strength meter starts illuminating.<br>Note: Before adjustment, select AM mode and wait for more than three minutes. |

# 4. MECHANISM ASS'Y AND PARTS LIST

## 4.1. Synthesis

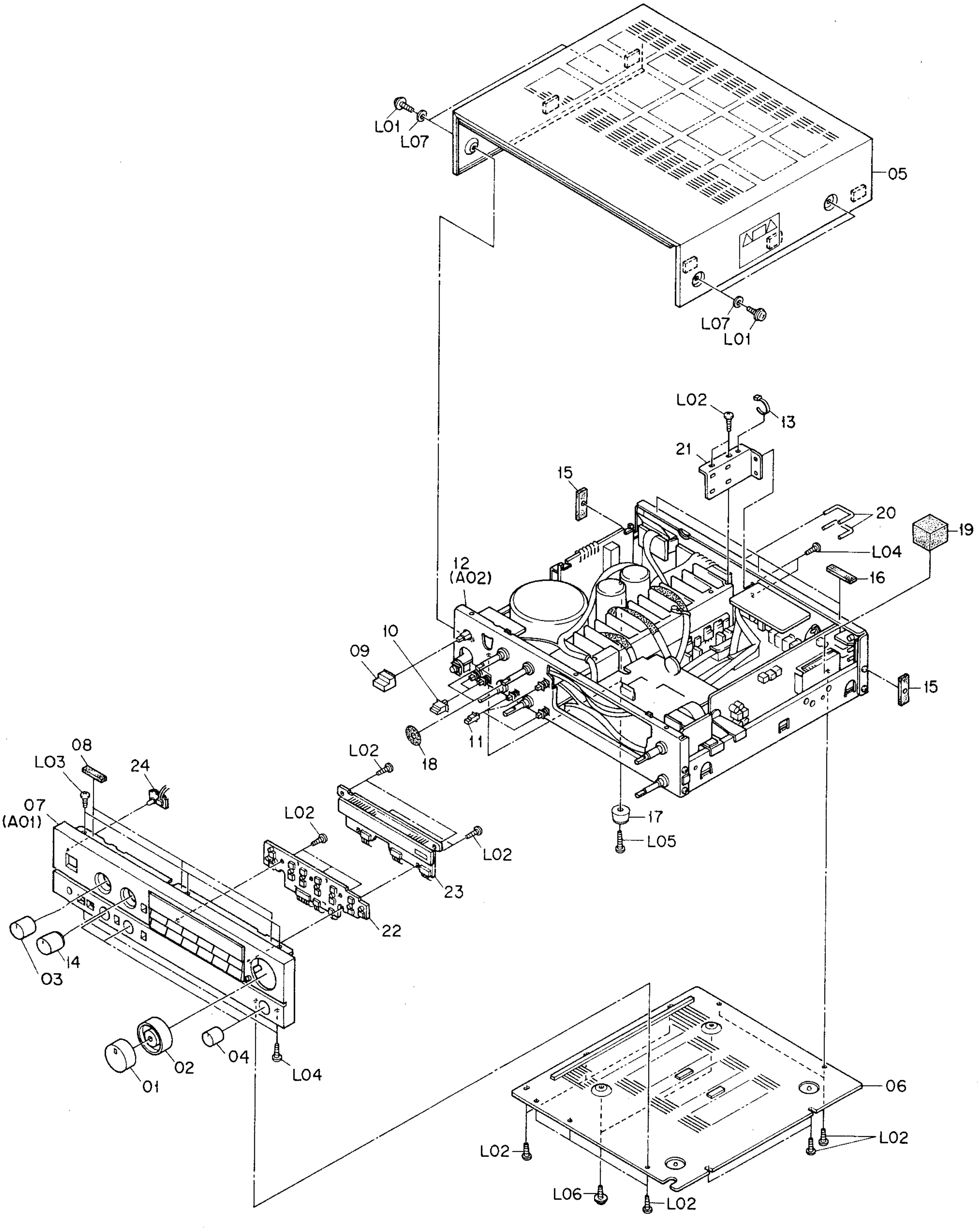

L01
L07
05
L07
L01
L02
13
21
15
20
19
L04
16
12
(A02)
10
09
15
18
11
17
L05
08
L03
24
07
(A01)
L02
L02
L02
23
22
03
14
03
02
04
01
L04
06
L02
L02
L06
L02

Fig. 4.1

### 4.2. Front Panel Ass'y (A01)

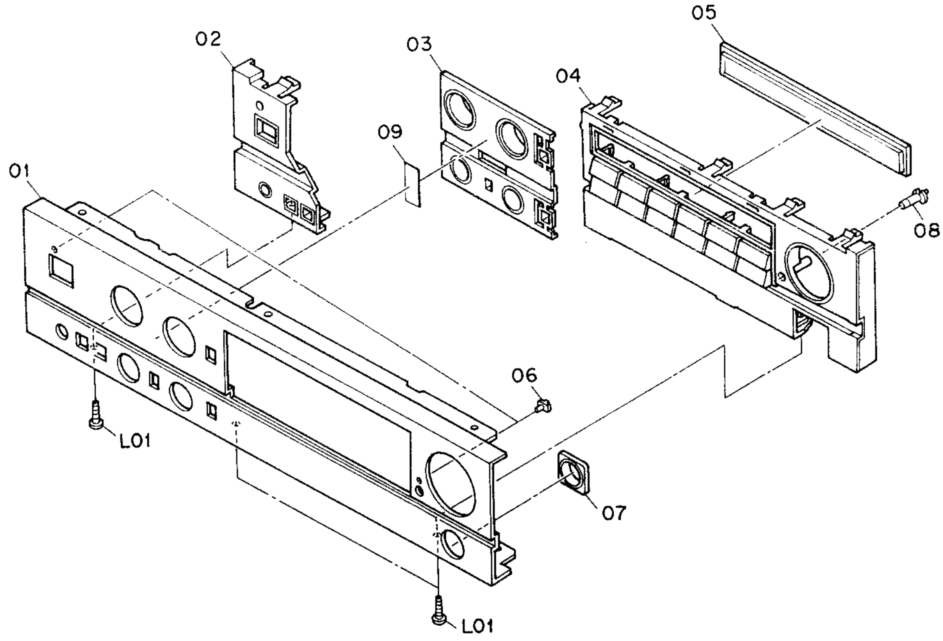
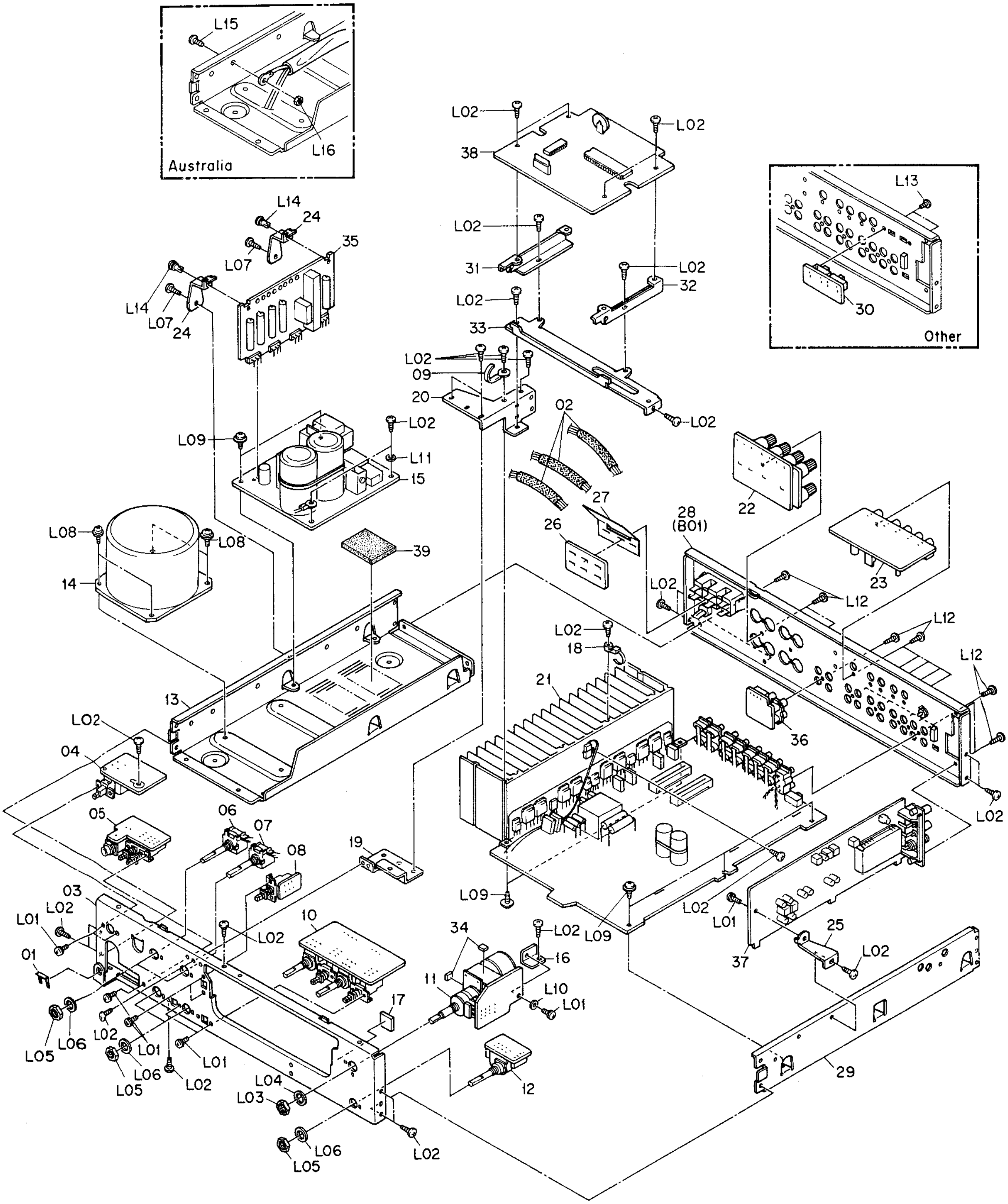


Fig. 4.2

| Schematic Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|
| | | Synthesis<br>Serial No.: D10601001 - | |
| 01 | HA05241A | Volume Knob Ass'y | 1 |
| 02 | HA05242A | Balance Knob Ass'y | 1 |
| 03 | HA05105A | Selector Knob Ass'y | 1 |
| 04 | HA05106A | Tone Control Knob Ass'y | 3 |
| 05 | HA05234A | Top Cover Ass'y (SR-4A & SR-4 (Canada & Australia)) | 1 |
| | HA05235A | Top Cover Ass'y (SR-4 (Other)) (Consisting of the followings:) | 1 |
| | (0H04934C) | Top Cover | (1) |
| | (0J05261A) | Top Cover Cushion | (5) |
| | (0M04377B) | Caution Label | (1) |
| | (MA01001A) | F. Code Labels | (1) |
| | (0M04811A) | Voltage Caution Sheet (SR-4 (Other)) | (1) |
| | (0M04812A) | Voltage Caution Label (SR-4 (Other)) | (1) |
| 06 | JA04283A | Bottom Cover Ass'y (Consisting of the followings:) | 1 |
| | (0E00888A) | BT3x12 ⊕ Binding | (2) |
| | (0J05162A) | Leg T-S | (2) |
| | (0J05214A) | P.C.B. Cushion | (1) |
| | (0J05309A) | BS Damper 1VR | (2) |
| | (0J05324C) | Bottom Cover | (1) |
| | (0J05367A) | Heat Sink Cushion | (1) |
| | (0M04377B) | Caution Label | (1) |
| 07 | HA05213A | Front Panel Ass'y (SR-4A) | 1 |
| | HA05216A | Front Panel Ass'y (SR-4 (Canada)) | 1 |
| | HA05215A | Front Panel Ass'y (SR-4 (Australia & Other)) | 1 |
| 08 | 0J05364A | Top Cover Cushion T4 | 5 |
| 09 | 0H04947A | Power Switch Knob | 1 |
| 10 | 0H04950B | Push Switch Knob 10L | 2 |
| 11 | 0H04949B | Push Switch Knob 5L | 3 |
| 12 | JA04278A | Chassis Ass'y (SR-4A) | 1 |
| | JA04282A | Chassis Ass'y (SR-4 (Canada)) | 1 |
| | JA04280A | Chassis Ass'y (SR-4 (Australia)) | 1 |
| | JA04281A | Chassis Ass'y (SR-4 (Other)) | 1 |
| 13 | 0B90019A | Insu-Lock SKB80 (SR-4A) | 34 |
| | 0B90019A | Insu-Lock SKB80 (SR-4) | 37 |
| 14 | HA05243A | Selector Knob Ass'y | 1 |
| 15 | 0J05226A | Side Cushion | 2 |
| 16 | 0J05363A | Top Cover Cushion T3 | 3 |
| 17 | 0J05162A | Leg T-S | 2 |
| 18 | 0J05258B | Selector Knob Himelon | 2 |
| 19 | 0J05365A | Front-end Cushion | 1 |
| 20 | 0B90256A | U-shape Pin 14 | 2 |
| 21 | 0J05204B | Heat Sink Holder C | 1 |
| 22 | BA06593A | Control Switch P.C.B. Ass'y | 1 |
| 23 | BA06592A | Display P.C.B. Ass'y (SR-4A & SR-4 (Canada)) | 1 |
| | BA06646A | Display P.C.B. Ass'y (SR-4 (Australia & Other)) | 1 |
| 24 | BA06645A | Power Indicator P.C.B. Ass'y | 1 |
| L01 | 0E03032A | BT4x8 ⊕ Pan Washer-faced (Black Chromate) | 4 |
| L02 | 0E00868A | BT3x8 ⊕ Binding (SR-4A) | 21 |
| | 0E00868A | BT3x8 ⊕ Binding (SR-4) | 19 |
| L03 | 0E00857A | BT3x6 ⊕ Binding | 3 |
| L04 | 0E00921A | BT3x8 ⊕ Binding (Black Chromate) | 4 |
| L05 | 0E00888A | BT3x12 ⊕ Binding | 2 |
| L06 | 0E03157A | BT3x8 ⊕ Binding with Washer | 2 |
| L07 | 0E03410A | Washer 4.3x8x0.8 | 4 |
| — | 0M03917A | Seal (SR-4A) | 1 |
| — | 0M04380A | Barrier Caution Seal CS2 (SR-4A & SR-4 (Canada)) | 1 |
| — | 0M04896A | Fuse Caution Seal (SR-4A & SR-4 (Canada)) | 1 |
| — | 0M04897A | Serial No. Seal | 1 |
| — | MA01003A | US Labels (SR-4A) | 1 |
| **A01** | **HA05213A** | **Front Panel Ass'y (SR-4A)** | 1 |
| | **HA05216A** | **Front Panel Ass'y (SR-4 (Canada))** | 1 |
| | **HA05215A** | **Front Penel Ass'y (SR-4 (Australia & Other))**<br>Serial No.: D10601001 - | 1 |
| 01 | 0H05042A | Front Panel (SR-4A) | 1 |
| | 0H05043A | Front Panel (SR-4) | 1 |
| 02 | 0H04935C | Front Escutcheon L | 1 |
| 03 | 0H04936A | Front Escutcheon C | 1 |
| 04 | HA05224A | Front Escutcheon R Ass'y | 1 |
| 05 | 0H04938A | Display Lens | 1 |
| 06 | 0H05039A | Power Lens | 2 |
| 07 | 0H05040A | Loudness Escutcheon | 1 |
| 08 | 0H05041A | Muting Switch Knob | 1 |
| L01 | 0E00921A | BT3x8 ⊕ Binding (Black Chromate) | 3 |

### 4.3. Chassis Ass'y (A02)


L15
L16
Australia
L13
30
Other
L02
38
L02
L14
24
L07
35
L14
L07
24
L02
31
L02
32
L02
33
L02
09
20
L02
02
L09
L02
L11
15
22
27
28
(B01)
26
L08
L08
39
14
23
L02
L12
L12
L12
L02
18
21
13
L02
04
36
L02
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L09
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L02
L01
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34
L02
16
25
L02
37
11
L10
L01
17
L05
L06
L02
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L05
L02
L04
L03
12
29
L06
L05
L02

Fig. 4.3

| Schematic Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|
| A02 | JA04278A | Chassis Ass'y (SR-4A) | 1 |
| | JA04282A | Chassis Ass'y (SR-4 (Canada)) | 1 |
| | JA04280A | Chassis Ass'y (SR-4 (Australia)) | 1 |
| | JA04281A | Chassis Ass'y (SR-4 (Other)) | 1 |
| | | Serial No.: D10601001 - | |
| 01 | 0J05092A | Snap Plate | 1 |
| 02 | 0B80126A | Glass Fiber Tube | 3 |
| 03 | 0J05339A | Front Chassis | 1 |
| 04 | BA06605A | Power Switch P.C.B. Ass'y (SR-4A & SR-4 (Canada)) | 1 |
| | BA06615A | Power Switch P.C.B. Ass'y (SR-4 (Australia)) | 1 |
| | BA06807A | Power Switch P.C.B. Ass'y (SR-4 (Other)) | 1 |
| 05 | BA06600A | Speaker Switch P.C.B. Ass'y | 1 |
| 06 | 0B70101A | Rotary Switch 370mm | 1 |
| 07 | 0B70102A | Rotary Switch 340mm | 1 |
| 08 | BA06608A | MM/MC Switch P.C.B. Ass'y | 1 |
| 09 | 0E03145A | Coating Clip CS-9 | 1 |
| 10 | BA06598A | Tone Control P.C.B. Ass'y | 1 |
| 11 | BA06597A | Volume Motor P.C.B. Ass'y | 1 |
| 12 | BA06604A | Loudness Volume P.C.B. Ass'y | 1 |
| 13 | 0J05325B | Power Supply Chassis | 1 |
| 14 | 0B50087A | Power Transformer (SR-4A & SR-4 (Canada)) | 1 |
| | 0B50088A | Power Transformer (SR-4 (Australia)) | 1 |
| | 0B50089A | Power Transformer (SR-4 (Other)) | 1 |
| 15 | BA06599A | Power Supply P.C.B. Ass'y | 1 |
| 16 | 0J05331A | Motor Holder | 1 |
| 17 | 0J05307A | BS Damper 1R | 1 |
| 18 | 0B90210A | Insu-Lock T30MR-HS | 1 |
| 19 | 0J05323B | Heat Sink Holder B | 1 |
| 20 | 0J05334A | Heat Sink Holder A | 1 |
| 21 | BA06594A | Main P.C.B. Ass'y (SR-4A & SR-4 (Canada)) | 1 |
| | BA06595A | Main P.C.B. Ass'y (SR-4 (Australia)) | 1 |
| | BA06596A | Main P.C.B. Ass'y (SR-4 (Other)) | 1 |
| 22 | BA06603A | Speaker Terminal P.C.B. Ass'y | 1 |
| 23 | BA06602A | Video Amp. P.C.B. Ass'y | 1 |
| 24 | 0J05321A | Fuse P.C.B. Holder | 2 |
| 25 | 0J05322A | Tuner P.C.B. Holder | 1 |
| 26 | BA06601A | AC Outlet P.C.B. Ass'y (SR-4A & SR-4 (Canada & Other)) | 1 |
| 27 | 0J05327B | AC Insulator (SR-4A & SR-4 (Canada & Other)) | 1 |
| 28 | HA05218A | Rear Panel Ass'y (SR-4A) | 1 |
| | HA05220A | Rear Panel Ass'y (SR-4 (Canada)) | 1 |
| | HA05222A | Rear Panel Ass'y (SR-4 (Australia)) | 1 |
| | HA05221A | Rear Panel Ass'y (SR-4 (Other)) | 1 |
| 29 | 0J05202C | Side Chassis | 1 |
| 30 | BA06611A | IF Band Selector Switch P.C.B. Ass'y (SR-4 (Other)) | 1 |
| 31 | 0J05332A | Logic P.C.B. Holder L | 1 |
| 32 | 0J05333A | Logic P.C.B. Holder R | 1 |
| 33 | 0J05340B | P.C.B. Holder | 1 |
| 34 | 0J05366A | Volume Damper | 2 |
| 35 | BA06606A | Fuse P.C.B. Ass'y (SR-4A & SR-4 (Canada)) | 1 |
| | BA06813A | Fuse P.C.B. Ass'y (SR-4 (Australia)) | 1 |
| | BA06801A | Fuse P.C.B. Ass'y (SR-4 (Other)) | 1 |
| 36 | BA06607A | Pin Jack P.C.B. Ass'y | 1 |
| 37 | BA06609A | Tuner P.C.B. Ass'y (SR-4A & SR-4 (Canada)) | 1 |
| | BA06620A | Tuner P.C.B. Ass'y (SR-4 (Australia)) | 1 |
| | BA06619A | Tuner P.C.B. Ass'y (SR-4 (Other)) | 1 |
| 38 | BA06610A | Logic P.C.B. Ass'y (SR-4A & SR-4 (Canada & Australia)) | 1 |
| | BA06621A | Logic P.C.B. Ass'y (SR-4 (Other)) | 1 |
| 39 | 0J05380A | P.C.B. Cushion | 1 |
| L01 | 0E00612A | M3x6 ⊕Pan (2A) | 9 |
| L02 | 0E00868A | BT3x8 ⊕Binding | 25 |
| L03 | — | Nut Hex. M9 | (1) |
| L04 | — | Washer | (1) |
| L05 | — | Nut Hex. M7 | (5) |
| L06 | — | Washer | (5) |
| L07 | 0E00857A | BT3x6 ⊕Binding | 2 |
| L08 | 0E03032A | BT4x8 ⊕Pan Washer-faced (Black Chromate) | 4 |
| L09 | 0E03157A | BT3x8 ⊕Binding with Washer | 7 |
| L10 | 0E03409A | Washer 3.2x5.7x1.2 (Copper) | 1 |
| L11 | 0J05294A | Washer 3.1x8x1 (Copper) | 1 |
| L12 | 0E00921A | BT3x8 ⊕Binding (Black Chromate) | 17 |
| L13 | 0E00945A | M2.6x4 ⊕Binding (Black Chromate) (SR-4 (Other)) | 2 |
| L14 | 0J05284A | Plastic Rivet 3x4.5 | 2 |
| L15 | 0E00506A | Nut Hex. M4 (SR-4 (Australia)) | 1 |
| L16 | 0E00929A | M4x8 ⊕Binding (SR-4 (Australia)) | 1 |
| — | 0M04898A | Amp. No. Seal | 1 |
| — | 0B80125A | Transformer Wire (SR-4 (Other)) | 1 |
| — | 0J05373B | Diode Barrier | 1 |

### 4.4. Rear Panel Ass'y (B01)

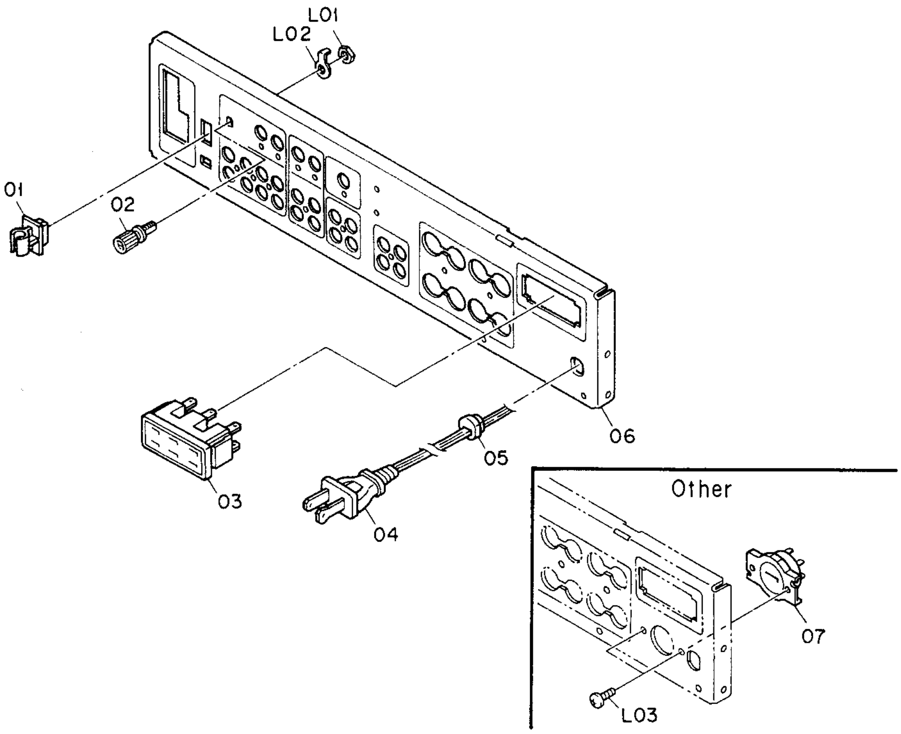


Fig. 4.4

| Schematic Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|
| B01 | HA05218A | Rear Panel Ass'y (SR-4A) | 1 |
| | HA05220A | Rear Panel Ass'y (SR-4 (Canada)) | 1 |
| | HA05222A | Rear Panel Ass'y (SR-4 (Australia)) | 1 |
| | HA05221A | Rear Panel Ass'y (SR-4 (Other))<br>Serial No.: D10601001 - | 1 |
| 01 | 0B90071A | AM Loop Antenna Holder | 1 |
| 02 | 0B81604A | Ground Terminal T-5435 | 1 |
| 03 | 0B81706A | AC Outlet 3P (SR-4A & SR-4 (Canada & Other)) | 1 |
| 04 | 0B90205A | Power Cord (SR-4A & SR-4 (Canada & Other)) | 1 |
| | 0B90269A | Power Cord (SR-4 (Australia)) | 1 |
| 05 | 0B08351A | Cord Bushing 4K-4 (SR-4A & SR-4 (Canada & Other)) | 1 |
| | 0B90273A | Cord Bushing 4K-4 (SR-4 (Australia)) | 1 |
| 06 | 0H05049A | Rear Panel (SR-4A) | 1 |
| | 0H05045B | Rear Panel (SR-4 (Canada)) | 1 |
| | 0H05047A | Rear Panel (SR-4 (Australia)) | 1 |
| | 0H05046A | Rear Panel (SR-4 (Other)) | 1 |
| 07 | 0B70049A | Voltage Selector (SR-4 (Other)) | 1 |
| L01 | — | Nut Ground Terminal | (1) |
| L02 | — | Earth Lug (Ground Terminal) | (1) |
| L03 | 0E00985A | M3x6 ⊕ Binding (SR-4 (Other)) | 2 |

## 5. MOUNTING DIAGRAM AND PARTS LIST

Notes:
1. Mounting diagram shows a dip side view of the printed circuit board.
2. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
3. Following transistors are interchangeable with each other.
   - a. 2SA733, 2SA608SP, 2SA1048, 2SA1175
   - b. 2SC945, 2SC536SP, 2SC2458, 2SC2785
4. Abbreviation for part name:
   TR — Transistor, SiD — Silicon Diode, ZD — Zener Diode, Varicap — Variable Capacitance Diode
   RK — Carbon Resistor, RM — Metal Film Resistor, RF — Fail Safe Type Resistor, RW — Wire Wound Resistor
   CE — Electrolytic Capacitor, CM — Mylar Capacitor, CC — Ceramic Capacitor, CP — PP Capacitor
   CMM — Metalized Mylar Capacitor, CSP — Polystyrene Capacitor, C — Mica Capacitor

### 5.1. Power Switch P.C.B. Ass'y

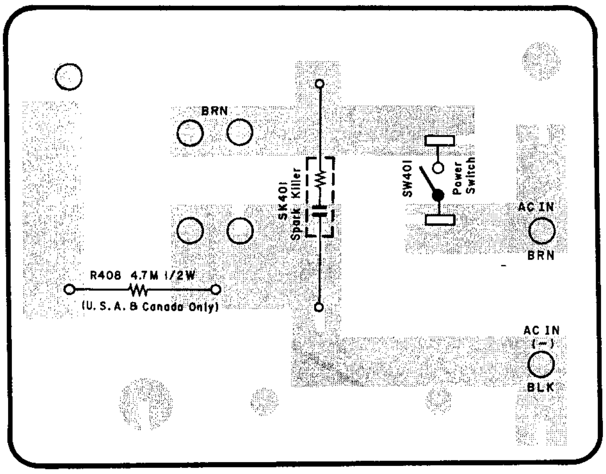


Fig. 5.1

### 5.3. Power Indicator P.C.B. Ass'y

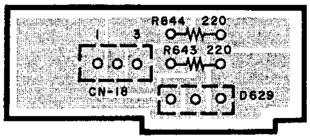


Fig. 5.3

### 5.2. AC Outlet P.C.B. Ass'y

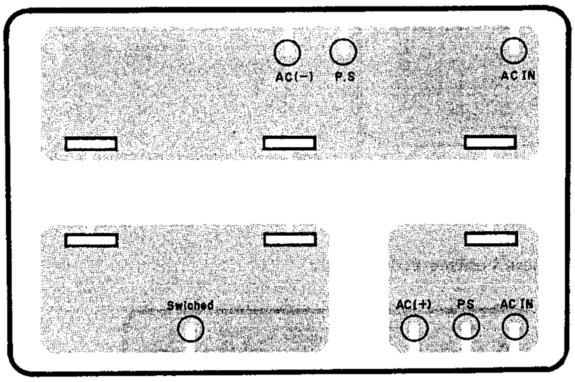


Fig. 5.2

### 5.4. Pin Jack P.C.B. Ass'y

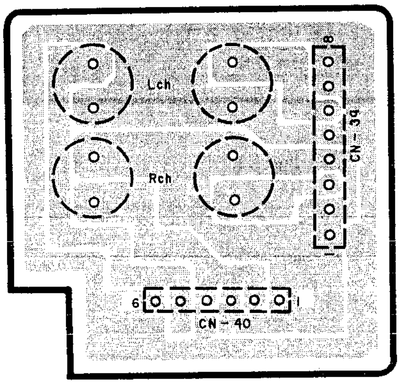


Fig. 5.4

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06605A | Power Switch P.C.B. Ass'y (SR-4A & SR-4 (Canada)) |
| | BA06615A | Power Switch P.C.B. Ass'y (SR-4 (Australia)) |
| | BA06807A | Power Switch P.C.B. Ass'y (SR-4 (Other)) |
| | 0B60443A | Power Switch P.C.B. |
| R408 | 0B20057A | RK 4.7M 1/2W J (SR-4A & SR-4 (Canada)) |
| SW401 | 0B71006A | Power Switch SDL1P |
| SK401 | 0B08342A | Spark Killer ECQ-JC187C (SR-4A & SR-4 (Canada)) |
| | 0B08240A | Spark Killer Q-J0187B (SR-4 (Australia & Other)) |
| | 0B82994A | PD Connector V430 BRN (1) |
| | 0B82995A | PD Connector V430 BLK (1) |
| | 0E00037A | Earth Lug B-5 (SR-4A & SR-4 (Canada)) (1) |
| | 0E00752A | Eyelet 2x3 (SR-4 (Australia)) (1) |
| | BA06601A | AC Outlet P.C.B. Ass'y (SR-4A & SR-4 (Canada & Other)) |
| | 0B60448A | AC Outlet P.C.B. |
| | 0E00752A | Eyelet 2x3 (1) |
| | BA06645A | Power Indicator P.C.B. Ass'y |
| | 0B60449A | Power Indicator P.C.B. |
| D629 | 0B12421A | LED SRP-56PDWF (GRN/RED) |
| R643,644 | 0B09661A | RK 220 1/6W J |
| CN18 | 0B82958A | 3P Connector RED |
| | BA06607A | Pin Jack P.C.B. Ass'y |
| | 0B60435A | Pin Jack P.C.B. |
| CN39,40 | 0B81013A | Dip Mate 6P WH6D- |
| | 0B81710A | 4P Pin Jack WH6D-1 (1) |

### 5.5. IF Band Selector P.C.B. Ass'y

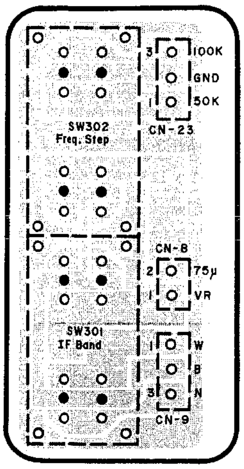

3
100K
GND
1
50K
SW302
Freq. Step
CN-23
CN-8
2
75μ
1
VR
SW301
IF Band
1
W
B
3
N
CN-9

Fig. 5.5

### 5.6. MM/MC Switch P.C.B. Ass'y

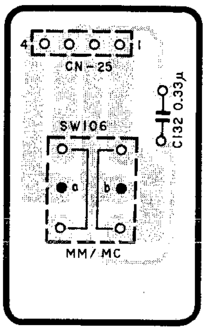

4
1
CN-25
SW106
a
b
MM/MC
C132 0.33μ

Fig. 5.6

### 5.7. Speaker Switch P.C.B. Ass'y

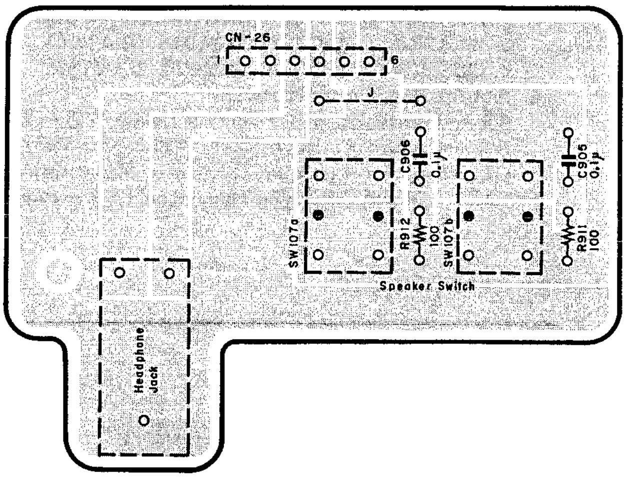

CN-26
1
6
J
C906 0.1μ
R912 100
SW107a
SW107b
C905 0.1μ
R911 100
Speaker Switch
Headphone Jack

Fig. 5.7

### 5 8. Loudness Volume P.C B. Ass'y

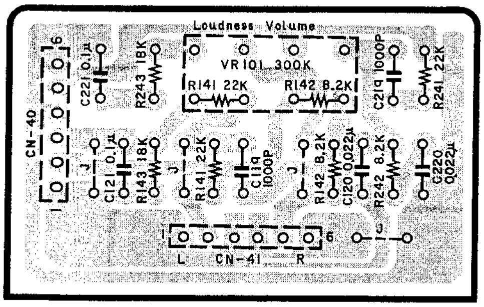

Loudness Volume
6
VR101 300K
R141 22K
R142 8.2K
C221 0.1μ
R243 18K
C219 1000P
R241 22K
CN-40
1
C121 0.1μ
R143 18K
J
R141 22K
C119 1000P
R142 8.2K
C120 0.022μ
R242 8.2K
C220 0.022μ
1
6
L
CN-41
R

Fig. 5.8

### 5.9. Volume Motor P.C.B. Ass'y

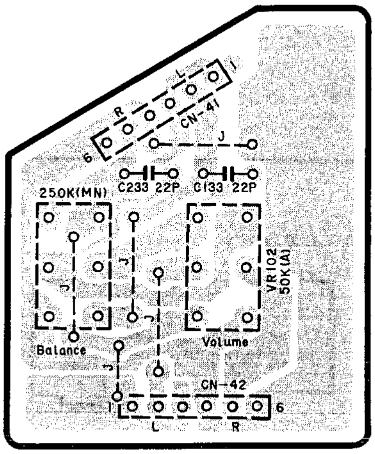

L
R
CN-41
1
6
J
C233 22P
C133 22P
250K(MN)
VR102 50K(A)
Balance
Volume
CN-42
1
6
L
R

Fig. 5.9

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | **BA06611A** | **IF Band Selector P.C.B. Ass'y (SR-4 (Other))** |
| | 0B60445A | Band Selector P.C.B. |
| SW301,302 | 0B70099A | Slide Switch SS091 |
| CN8 | 0B82948A | 2P Connector YEL |
| CN9 | 0B82949A | 3P Connector RED |
| CN23 | 0B82963A | 3P Connector WHT |
| | **BA06608A** | **MM/MC Switch P.C.B. Ass'y** |
| | 0B60436B | MM/MC Switch P.C.B. |
| C132 | 0B41304A | CMM 0.33μ 50V J |
| SW106 | 0B70105A | Push Switch SPUN12 6.5mm |
| CN25 | 0B82965A | 4P Connector WHT |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | **BA06600A** | **Speaker Switch P.C.B. Ass'y** |
| | 0B60444A | Speaker Switch P.C.B. |
| R911,912 | 0B09653A | RK 100 1/6W J |
| C905,906 | 0B41298A | CMM 0.1μ 50V J |
| SW107 | 0B70098A | Push Switch SPUN22 |
| CN26 | 0B82966A | 6P Connector WHT |
| | 0B81478A | Headphone Jack (1) |
| | **BA06604A** | **Loudness Volume P.C.B. Ass'y** |
| | 0B60433A | Loudness Volume P.C.B. |
| VR101 | 0B30075A | VR 300K (B)x2 |
| R141,241 | 0B09709A | RK 22K 1/6W J |
| R142,242 | 0B09699A | RK 8.2K 1/6W J |
| R143,243 | 0B09707A | RK 18K 1/6W J |
| C119,219 | 0B41791A | CSP 1000P 50V J |
| C120,220 | 0B41290A | CMM 0.022μ 50V J |
| C121,221 | 0B41298A | CMM 0.1μ 50V J |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| CN40,41 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82969A | Ribbon Cable 6P 170mm (2) |
| | 0B82970A | Ribbon Cable 6P 550mm (2) |
| | **BA06597A** | **Volume Motor P.C.B. Ass'y** |
| | 0B60434B | Volume Motor P.C.B. |
| VR102 | 0B30074A | Volume Motor Ass'y |
| C133,233 | 0B41702A | CSP 22P 50V J |
| C630 | 0B41617A | CC 0.1μ 25V Z |
| CN19 | 0B82959A | 2P Connector |
| CN41,42 | 0B81013A | Dip Mate 6P WH6D-1 |

### 5.10. Speaker Terminal P.C.B. Ass'y

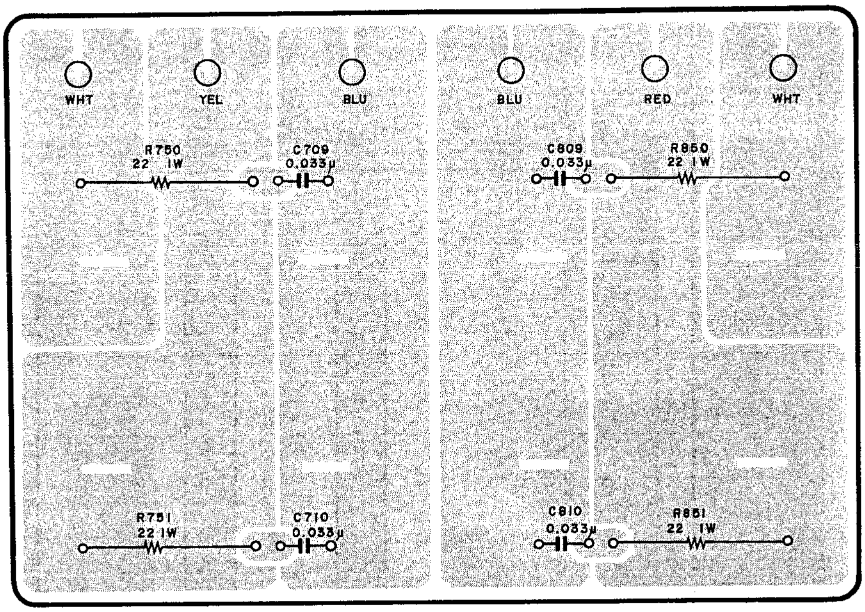

WHT
YEL
BLU
BLU
RED
WHT
R750 22 1W
C709 0.033μ
C809 0.033μ
R850 22 1W
R751 22 1W
C710 0.033μ
C810 0.033μ
R851 22 1W

Fig. 5.10

### 5.11. Tone Control P.C.B. Ass'y

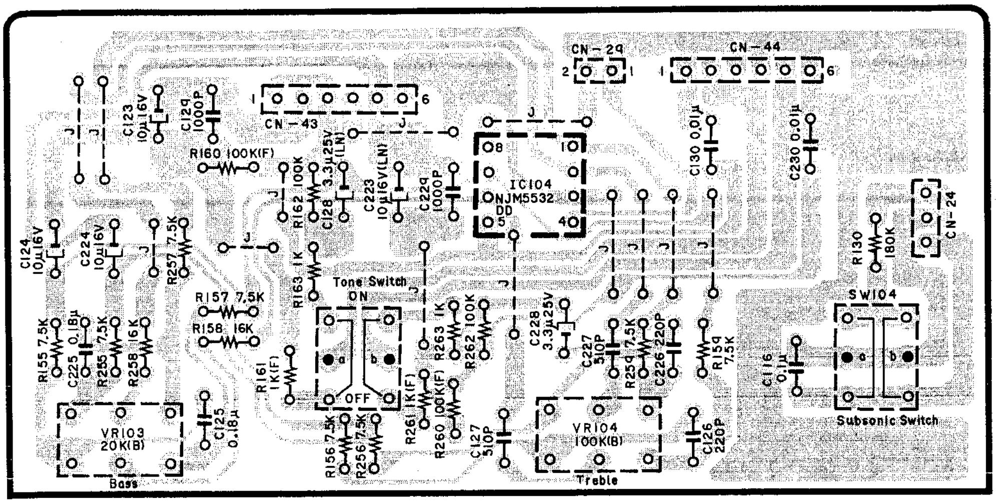

CN-29
CN-44
CN-43
CN-24
IC104 NJM5532 DD
C123 10μ16V
C129 1000P
R160 100K(F)
R162 100K
C128 3.3μ25V (LN)
C223 10μ16V(LN)
C229 1000P
C130 0.01μ
C230 0.01μ
C124 10μ16V
C224 10μ16V
R257 7.5K
R163 1K
R157 7.5K
R158 16K
Tone Switch
ON
OFF
R155 7.5K
C225 0.18μ
R255 7.5K
R258 16K
R161 1K(F)
R263 1K
R262 100K
C228 3.3μ25V
C227 510P
R259 7.5K
C226 220P
R159 7.5K
C116 0.1μ
R130 180K
SW104
Subsonic Switch
VR103 20K(B)
Bass
C125 0.18μ
R156 7.5K
R256 7.5K
R261 1K(F)
R260 100K(F)
C127 510P
VR104 100K(B)
Treble
C126 220P

Fig. 5.11

| Schematic Ref. No. | Part No. | Description | Schematic Ref. No. | Part No. | Description | Schematic Ref. No. | Part No. | Description |
|---|---|---|---|---|---|---|---|---|
| | BA06603A | Speaker Terminal | | BA06598A | Tone Control P.C.B. | C116 | 0B41298A | CMM 0.1μ 50V J |
| | | P.C.B. Ass'y | | | Ass'y | C123,124 | 0B09816A | CE 10μ 16V (LN) |
| | | | | | | 223,224 | | |
| | 0B60446A | Speaker Terminal | | 0B60432A | Tone Control P.C.B. | C125,225 | 0B41301A | CMM 0.18μ 50V J |
| | | P.C.B. | IC104 | 0B11204A | IC NJM5532DD | C126,226 | 0B41788A | CSP 220P 50V J |
| R750,751 | 0B24140A | RF 22 1W | VR103 | 0B30073A | VR 20K (B)x2 | C127,227 | 0B41789A | CSP 510P 50V J |
| 850,851 | | | VR104 | 0B30062A | VR 100K (B)x2 | C128,228 | 0B40460A | CE 3.3μ 50V (LN) |
| C709,710 | 0B41292A | CMM 0.033μ 50V J | R130 | 0B09731A | RK 180K 1/6W J | C129,229 | 0B41791A | CSP 1000P 50V J |
| 809,810 | | | R155,156 | 0B09698A | RK 7.5K 1/6W J | C130,230 | 0B41286A | CF 0.01μ50V J |
| | 0B81595B | Speaker Terminal 8P | 157,159 | | | CN24 | 0B82964A | 3P Connector RED |
| | | (1) | 255,256 | | | CN29 | 0B83004A | 2P Connector RED |
| | | | 257,259 | | | CN43,44 | 0B81013A | Dip Mate 6P |
| | | | R158,258 | 0B09706A | RK 16K 1/6W J | | | WH61-1 |
| | | | R160,260 | 0B25387A | RM 100K 1/6W F | | 0B82972A | Ribbon Cable 6P |
| | | | R161,261 | 0B25195A | RM 1.00K 1/6W F | | | 410mm (1) |
| | | | R162,262 | 0B09725A | RK 100K 1/6W J | | 0B82973A | Ribbon Cable 6P |
| | | | R163,263 | 0B09677A | RK 1K 1/6W J | | | 310mm (1) |
| | | | SW103,104 | 0B70074A | Push Switch 1Key | | | |

### 5.12. Fuse P.C.B. Ass'y

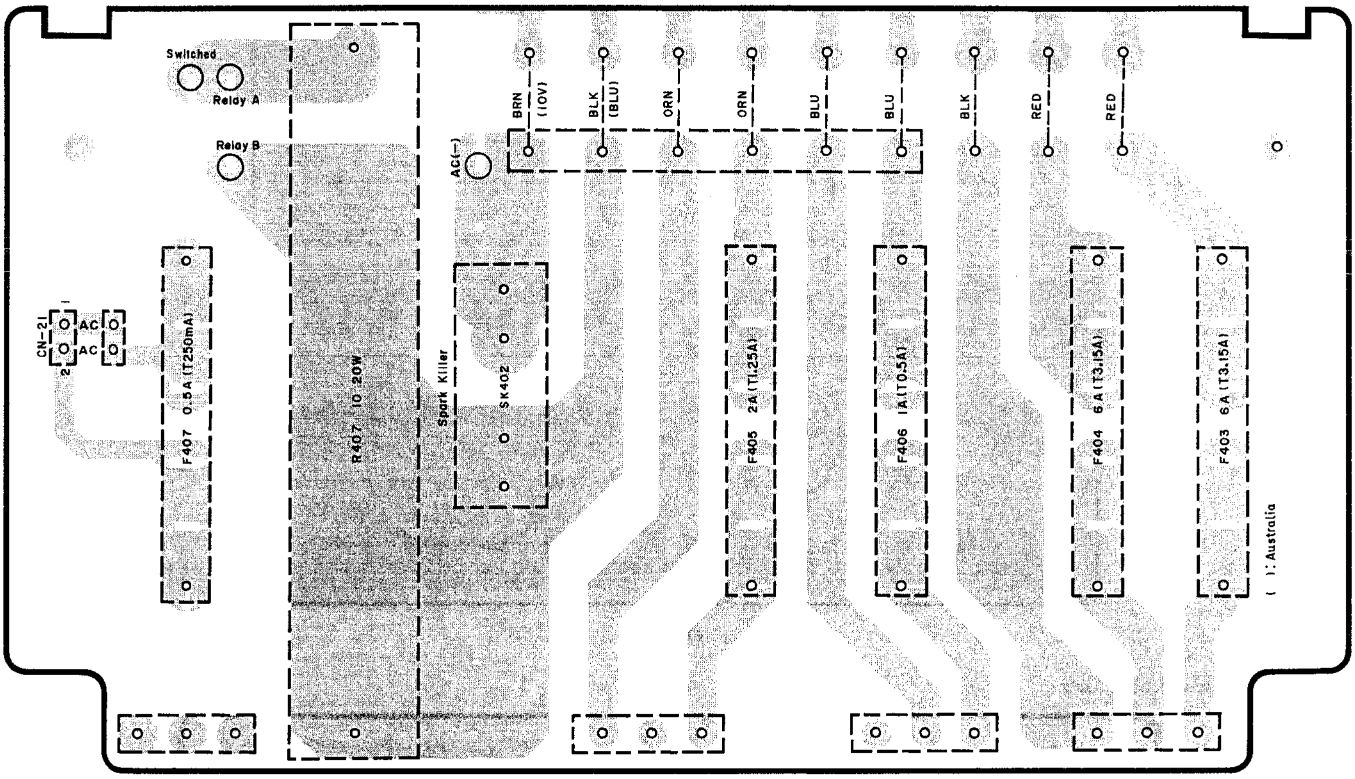

Switched
Relay A
Relay B
CN-21
1
2
AC
AC
F407 0.5A (T250mA)
R407 10 20W
Spark Killer
SK402
AC(—)
BRN (10V)
BLK (BLU)
ORN
ORN
BLU
BLU
BLK
RED
RED
F405 2A (T1.25A)
F406 1A (T0.5A)
F404 6A (T3.15A)
F403 6A (T3.15A)
( ): Australia

Fig. 5.12

### 5.13. Video Amp. P.C.B. Ass'y

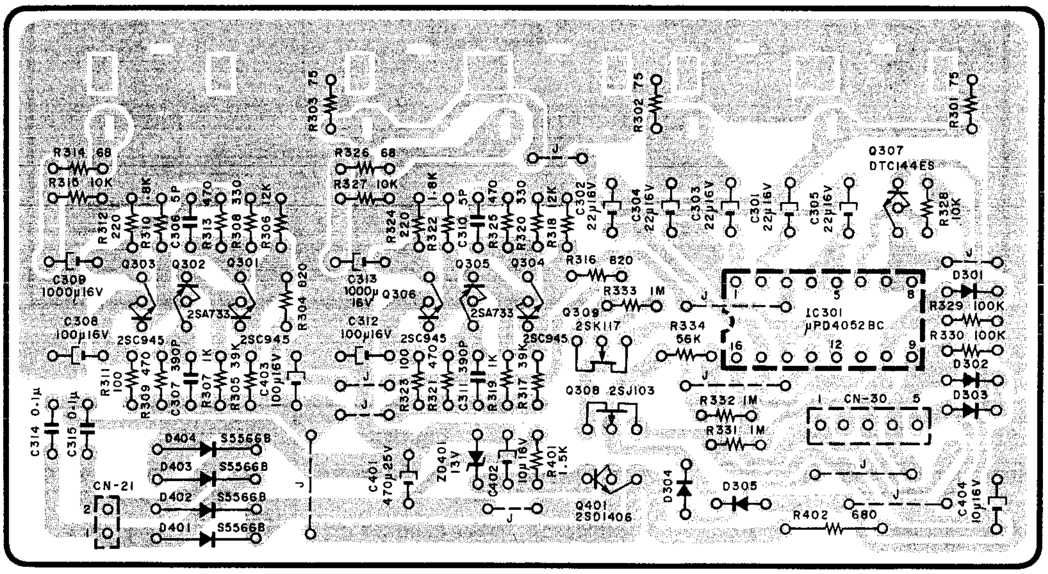

R303 75
R302 75
R301 75
R314 68
R315 10K
R326 68
R327 10K
R312 220
R310 1.8K
C306 5P
R313 470
R308 330
R306 12K
R324 220
R322 1.8K
C310 5P
R325 470
R320 330
R318 12K
C302 22μ16V
C304 22μ16V
C303 22μ16V
C301 22μ16V
C305 22μ16V
Q307 DTC144ES
R328 10K
C309 1000μ16V
Q303
Q302
Q301
2SA733
2SC945
2SC945
R304 820
C313 1000μ 16V
Q306
Q305
Q304
2SA733
2SC945
2SC945
R316 820
R333 1M
Q309 2SK117
R334 56K
J
IC301 μPD4052BC
1
5
8
16
12
9
D301
R329 100K
R330 100K
D302
D303
C308 100μ16V
R311 100
R309 470
C307 390P
R307 1K
R305 39K
C403 100μ16V
C312 100μ16V
R323 100
R321 470
C311 390P
R319 1K
R317 39K
Q308 2SJ103
R332 1M
R331 1M
CN-30
1
5
C314 0.1μ
C315 0.1μ
D404 S5566B
D403 S5566B
D402 S5566B
D401 S5566B
CN-21
2
1
C401 470μ25V
ZD401 13V
C402 10μ16V
R401 1.5K
Q401 2SD1406
D304
D305
R402 680
C404 10μ16V

Fig. 5.13

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
|  | **BA06606A** | **Fuse P.C.B. Ass'y (SR-4A & SR-4 (Canada))** |
|  | **BA06813A** | **Fuse P.C.B. Ass'y (SR-4 (Australia))** |
|  | **BA06801A** | **Fuse P.C.B. Ass'y (SR-4 (Other))** |
|  | 0B60447A | Fuse P.C.B. |
| R407 | 0B24145A | RC 10 2W |
| SK402 | 0B08342A | Spark Killer ECQ-JC187C (SR-4A & SR-4 (Canada)) |
|  | 0B08240A | Spark Killer Q-J0187B (SR-4 Australia & Other)) |
| F403,404 | 0B90248A | Fuse 6A (SR-4A & SR-4 (Canada & Other)) |
|  | 0B08281A | Fuse T3.15A 250V (SR-4 (Australia)) |
| F405 | 0B08525A | Fuse 2A (SR-4A & SR-4 (Canada & Other)) |
|  | 0B02240A | Fuse T1.25A 250V (SR-4 (Australia)) |
| F406 | 0B08374A | Fuse 1A (SR-4A & SR-4 (Canada & Other)) |
|  | 0B08263U | Fuse T315mA 250V (SR-4 (Australia)) |
| F407 | 0B08698A | Fuse 0.5A (SR-4A & SR-4 (Canada & Other)) |
|  | 0B08252A | Fuse T250mA 250V (SR-4 (Australia)) |
| CN21 | 0B82961A | 2P Connector WHT |
|  | 0B81634A | 2P-T Post (1) |
|  | 0B81740A | 6P Terminal (SR-4A & SR-4 (Canada)) (1) |
|  | 0B81722A | 4P Terminal (SR-4 (Australia & Other)) (1) |
|  | 0B81709A | 3P-T Post L Angle (4) |
|  | 0B08349B | Fuse Clip (SR-4 (Australia)) (10) |
|  | 0M04137A | Fuse Label T250mA (SR-4 (Australia)) (1) |
|  | 0M04194A | Fuse Label T315mA (SR-4 (Australia)) (1) |
|  | 0M04391A | Fuse Label T1.25A (SR-4 (Australia)) (1) |
|  | 0M04443A | Fuse Label T3.15Ax2 (SR-4 (Australia)) (1) |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
|  | **BA06602A** | **Video Amp. P.C.B. Ass'y** |
|  | 0B60389E | Video Amp. P.C.B. |
| IC301 | 0B11247A | IC μPD4052BC |
| Q301,303 304,306 | 0B01872A | TR 2SC945L (P,Q) |
| Q302,305 | 0B06013A | TR 2SA733 (P,Q) |
| Q307 | 0B10062A | TR DTC144ES |
| Q308 | 0B10211A | FET 2SJ103 |
| Q309 | 0B06129A | FET 2SK117 (Y) |
| Q401 | 0B06452A | TR 2SD1406 (Y) |
| D301-305 | 0B06398A | SiD 1SS176 (5) |
| D401-404 | 0B12362A | SiD S5566B (4) |
| ZD401 | 0B12317A | ZD 13V MTZ13B |
| R301,302 303 | 0B09650A | RK 75 1/6W J |
| R304,316 | 0B09675A | RK 820 1/6W J |
| R305,317 | 0B09715A | RK 39K 1/6W J |
| R306,318 | 0B09703A | RK 12K 1/6W J |
| R307,319 | 0B09677A | RK 1K 1/6W J |
| R308,320 | 0B09665A | RK 330 1/6W J |
| R309,313 321,325 | 0B09669A | RK 470 1/6W J |
| R310,322 | 0B09683A | RK 1.8K 1/6W J |
| R311,323 | 0B09653A | RK 100 1/6W J |
| R312,324 | 0B09661A | RK 220 1/6W J |
| R314,326 | 0B09649A | RK 68 1/6W J |
| R315,327 328 | 0B09701A | RK 10K 1/6W J |
| R329,330 | 0B09725A | RK 100K 1/6W J |
| R331,332 333 | 0B09749A | RK 1M 1/6W J |
| R334 | 0B09719A | RK 56K 1/6W J |
| R401 | 0B09681A | RK 1.5K 1/6W J |
| R402 | 0B05794A | RK 680 1/4W J |
| C301,302 303,304 305 | 0B01862A | CE 22μ 16V |
| C306,310 | 0B09276A | CC 5P 50V |
| C307,311 | 0B41002A | CP 390P 100V J |
| C308,312 403 | 0B01400A | CE 100μ 16V |
| C309,313 | 0B40082A | CE 1000μ 16V |
| C314,315 | 0B41298A | CMM 0.1μ 50V J |
| C401 | 0B40094A | CE 470μ 25V |
| C402,404 | 0B01412A | CE 10μ 16V |
| CN21 | 0B81223A | 2P-T Post (WHT) |
| CN30 | 0B81235A | 5P-T Post (WHT) |
|  | 0B81592B | Pin Jack 1P (5) |

### 5.14. Control Switch P.C.B. Ass'y

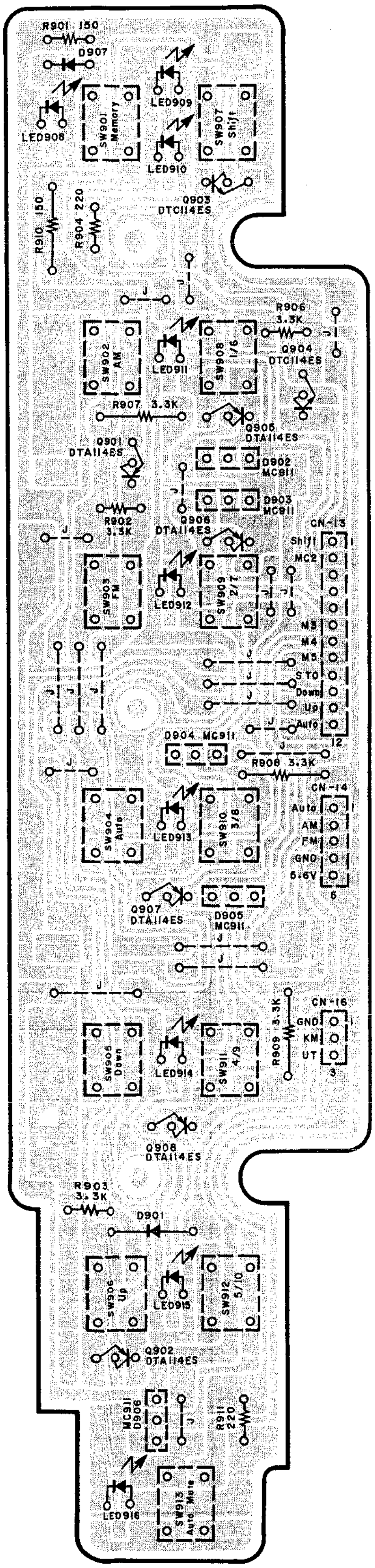
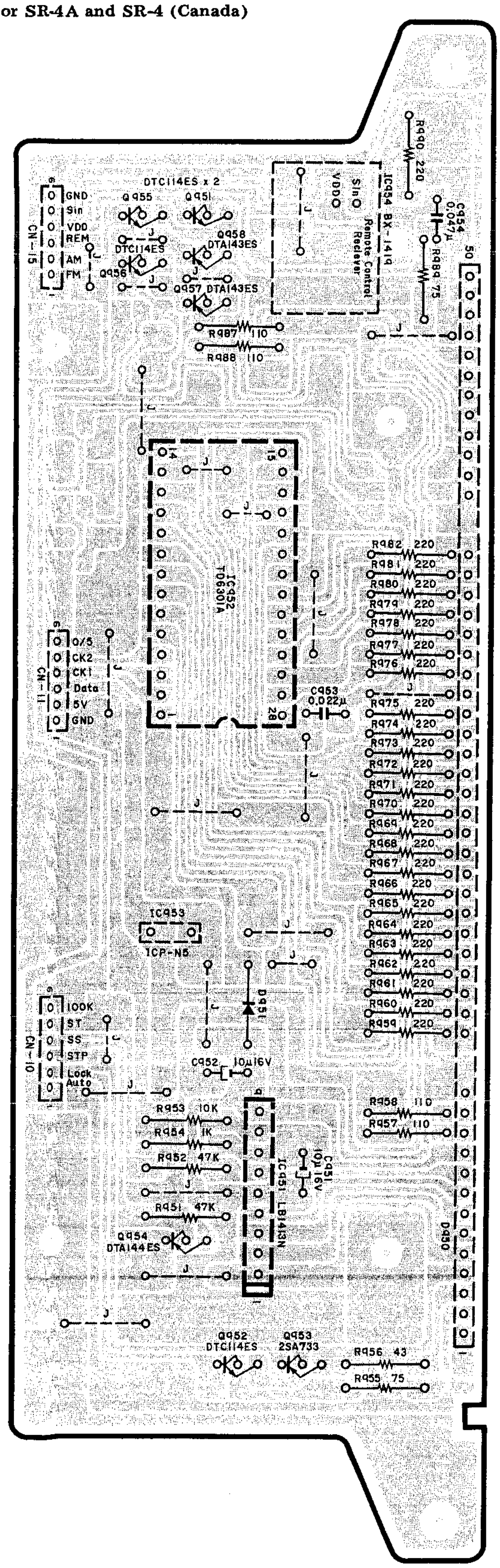

R901 150
D907
LED909
LED908
SW901 Memory
SW907 Shift
LED910
Q903 DTC114ES
R910 150
R904 220
R906 3.3K
SW902 AM
LED911
SW908 1/6
Q904 DTC114ES
R907 3.3K
Q901 DTA114ES
Q905 DTA114ES
D902 MC911
D903 MC911
R902 3.3K
Q906 DTA114ES
CN-13
Shift
MC2
SW903 FM
LED912
SW909 2/7
M3
M4
M5
STO
Down
Up
Auto
12
D904 MC911
R908 3.3K
CN-14
SW904 Auto
LED913
SW910 3/8
Auto
AM
FM
GND
5.6V
5
Q907 DTA114ES
D905 MC911
CN-16
R909 3.3K
GND
KM
UT
3
SW905 Down
LED914
SW911 4/9
Q908 DTA114ES
R903 3.3K
D901
SW906 Up
LED915
SW912 5/10
Q902 DTA114ES
D906 MC911
R911 220
LED916
SW913 Auto Mute
J

Fig. 5.14

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | **BA06593A** | **Control Switch P.C.B. Ass'y** |
| | 0B60442A | Control Switch P.C.B. |
| Q901,902 905,906 907,908 | 0B10058A | TR DTA114ES |
| Q903,904 | 0B10068A | TR DTC114ES |
| D901 | 0B06181A | SiD 1SS53 |
| D902,903 904,905 906 | 0B12391A | SiD MC911 |
| D907 | 0B06398A | SiD 1SS176 |
| LED908-916 | 0B12395A | LED SLR-34PC3F P-Green (9) |
| R901 | 0B09657A | RK 150 1/6W J |
| R902,903 906 | 0B09689A | RK 3.3K 1/6W J |
| R904,911 | 0B09661A | RK 220 1/6W J |
| R907,908 909 | 0B01681A | RK 3.3K 1/4W J |
| R910 | 0B05795A | RK 150 1/4W J |
| SW901-913 | 0B70062A | Tact Switch KHH10910 (13) |
| CN13 | 0B82953A | 12P Connector |
| CN14 | 0B82954A | 5P Connector |
| CN16 | 0B82956A | 3P Connector |
| | 0J05209B | LED Reflector (9) |
| | **BA06592A** | **Display P.C.B. Ass'y (SR-4A & SR-4 (Canada))** |
| | 0B60441A | Display P.C.B. |
| IC951 | 0B11244A | IC LB1413N |
| IC952 | 0B11160A | IC TD6301A |
| IC953 | 0B11248A | IC ICP-N5-T104 |
| IC954 | 0B19005A | IC BX-1419 |
| Q951,952 955,956 | 0B10068A | TR DTC114ES |
| Q953 | 0B06013A | TR 2SA733 (P,Q) |
| Q954 | 0B10053A | TR DTA144ES |
| Q957,958 | 0B10060A | TR DTA143ES |
| D950 | 0B12414A | Display SL7823-03 |
| D951 | 0B06181A | SiD 1SS53 |
| R951,952 | 0B05641A | RK 47K 1/4W J |
| R953 | 0B01888A | RK 10K 1/4W J |
| R954 | 0B01857A | RK 1K 1/4W J |
| R955,989 | 0B05959A | RK 75 1/4W J |
| R956 | 0B20415A | RK 43 1/4W J |
| R957,958 987,988 | 0B20416A | RK 110 1/4W J |
| R959-982 990 | 0B01933A | RK 220 1/4W J (25) |
| C951,952 | 0B40009A | CE 10µ 16V |
| C953 | 0B41787A | CC 0.022µ 25V Z |
| C954 | 0B41555A | CC 0.047µ 25V Z |
| CN10 | 0B82950A | 6P Connector RED |
| CN11 | 0B82951A | 6P Connector WHT |
| CN15 | 0B82955A | 6P Connector BLK |
| | 0E00846A | BT3x8 ⊕Pan (2) |
| | **BA06646A** | **Display P.C.B. Ass'y (SR-4 (Australia & Other))** |
| | 0B60441A | Display P.C.B. |
| IC951 | 0B11244A | IC LB1413N |
| IC952 | 0B11160A | IC TD6301A |
| IC953 | 0B11248A | IC ICP-N5-T104 |
| IC954 | 0B19005A | IC BX-1419 |
| Q951,952 955,956 | 0B10068A | TR DTC114ES |
| Q953 | 0B06013A | TR 2SA733 (P,Q) |
| Q954 | 0B10053A | TR DTA144ES |
| Q957,958 | 0B10060A | TR DTA143ES |
| Q959,961 962 | 0B10068A | TR DTC114ES |
| Q960 | 0B01872A | TR 2SC945L (P,Q) |
| D950 | 0B12414A | Display SL7823-03 |
| D951 | 0B06181A | SiD 1SS53 |
| D952,953 | 0B06398A | SiD 1SS176 |
| R951,952 | 0B05641A | RK 47K 1/4W J |
| R953 | 0B01888A | RK 10K 1/4W J |
| R954 | 0B01857A | RK 1K 1/4W J |
| R955,989 | 0B05959A | RK 75 1/4W J |
| R956 | 0B20415A | RK 43 1/4W J |
| R957,958 984-988 | 0B20416A | RK 110 1/4W J (7) |
| R959-983 990 | 0B01933A | RK 220 1/4W J (26) |
| R991 | 0B01846A | RK 4.7K 1/4W J |
| R992 | 0B09693A | RK 4.7K 1/6W J |
| C951,952 | 0B40009A | CE 10µ 16V |
| C953 | 0B41787A | CC 0.022µ 25V Z |
| C954 | 0B41555A | CC 0.047µ 25V Z |
| CN10 | 0B82950A | 6P Connector RED |
| CN11 | 0B82951A | 6P Connector WHT |
| CN15 | 0B82955A | 6P Connector BLK |
| | 0E00846A | BT3x8 ⊕Pan (2) |

## 5.15. Display P.C.B' Ass'y

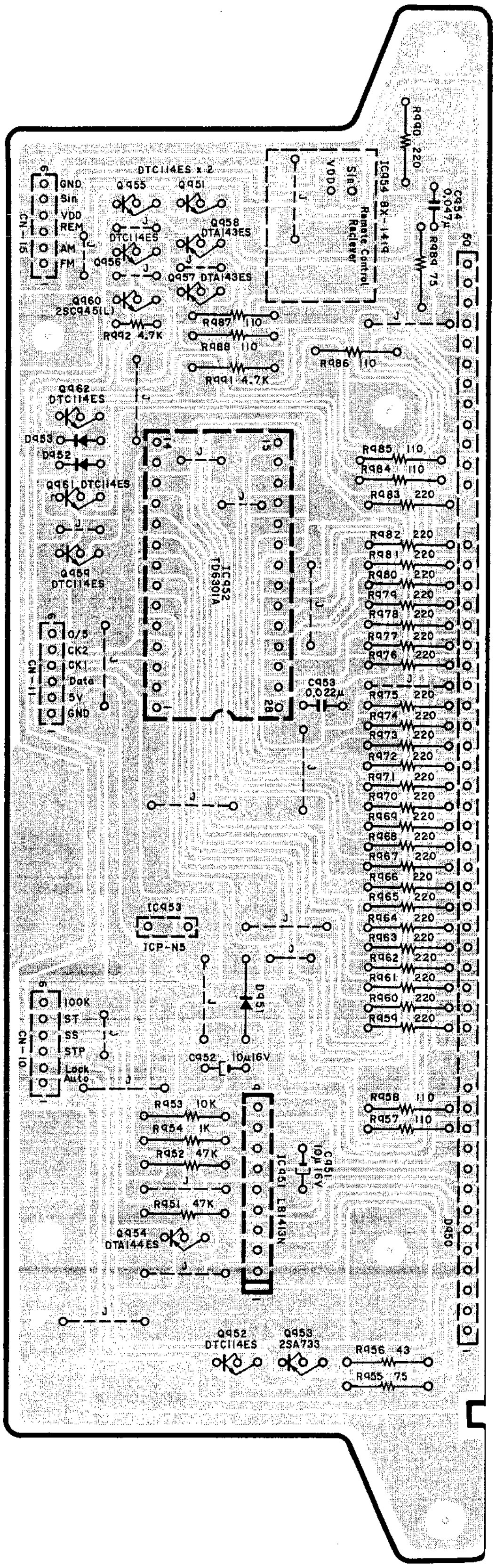
### (1) For SR-4A and SR-4 (Canada)



CN-15
GND
Sin
VDD
REM
AM
FM
DTC114ES x 2
Q955
Q951
Q958 DTA143ES
DTC114ES
Q956
Q957 DTA143ES
IC954 BX-1414 Remote Control Reciever
VDD
Sin
R990 220
C954 0.047μ
R989 75
R987 110
R988 110
IC952 TD6301A
CN-11
O/S
CK2
CK1
Data
5V
GND
C953 0.022μ
R982 220
R981 220
R980 220
R979 220
R978 220
R977 220
R976 220
R975 220
R974 220
R973 220
R972 220
R971 220
R970 220
R969 220
R968 220
R967 220
R966 220
R965 220
R964 220
R963 220
R962 220
R961 220
R960 220
R959 220
IC953 TCP-N5
D951
CN-10
100K
ST
SS
STP
Lock
Auto
C952 10μ16V
R953 10K
R954 1K
R952 47K
R951 47K
IC951 LB1413N
C951 10μ16V
R958 110
R957 110
Q954 DTA144ES
D950
Q952 DTC114ES
Q953 2SA733
R956 43
R955 75
J

Fig. 5.15.1

### (2) For SR-4 (Australia & Other)



CN-15
GND
Sin
VDD
REM
AM
FM
DTC114ES x 2
Q955
Q951
Q958 DTA143ES
DTC114ES
Q956
Q957 DTA143ES
IC954 BX-1414 Remote Control Reciever
VDD
Sin
R990 220
C954 0.047μ
R989 75
Q960 2SC945(L)
R992 4.7K
R987 110
R988 110
R991 4.7K
R986 110
Q962 DTC114ES
D953
D952
Q961 DTC114ES
Q959 DTC114ES
IC952 TD6301A
R985 110
R984 110
R983 220
CN-11
O/S
CK2
CK1
Data
5V
GND
C953 0.022μ
R982 220
R981 220
R980 220
R979 220
R978 220
R977 220
R976 220
R975 220
R974 220
R973 220
R972 220
R971 220
R970 220
R969 220
R968 220
R967 220
R966 220
R965 220
R964 220
R963 220
R962 220
R961 220
R960 220
R959 220
IC953 TCP-N5
D951
CN-10
100K
ST
SS
STP
Lock
Auto
C952 10μ16V
R953 10K
R954 1K
R952 47K
R951 47K
IC951 LB1413N
C951 10μ16V
R958 110
R957 110
Q954 DTA144ES
D950
Q952 DTC114ES
Q953 2SA733
R956 43
R955 75
J

Fig. 5.15.2

## 5.16. Power Supply P.C.B. Ass'y

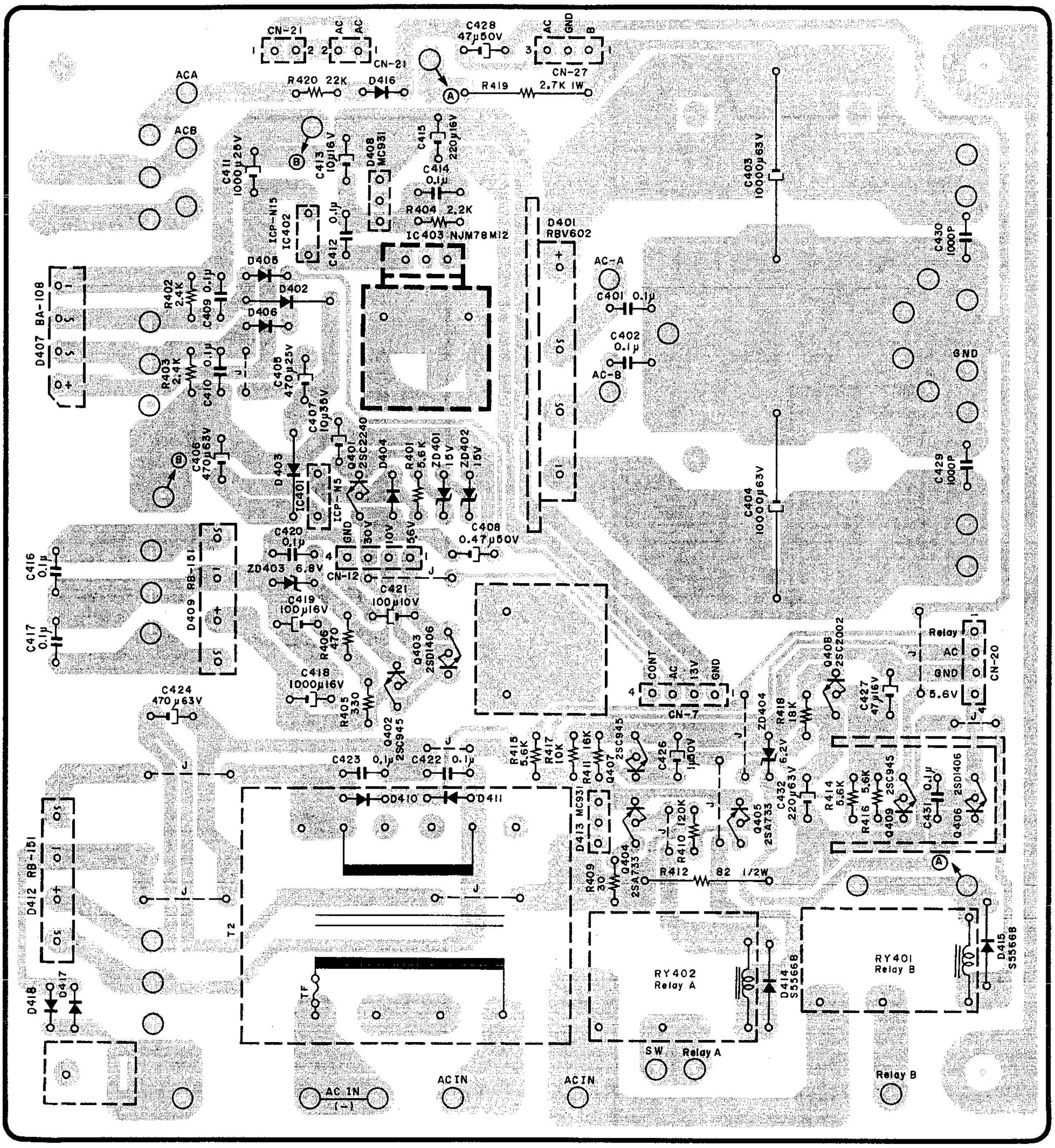
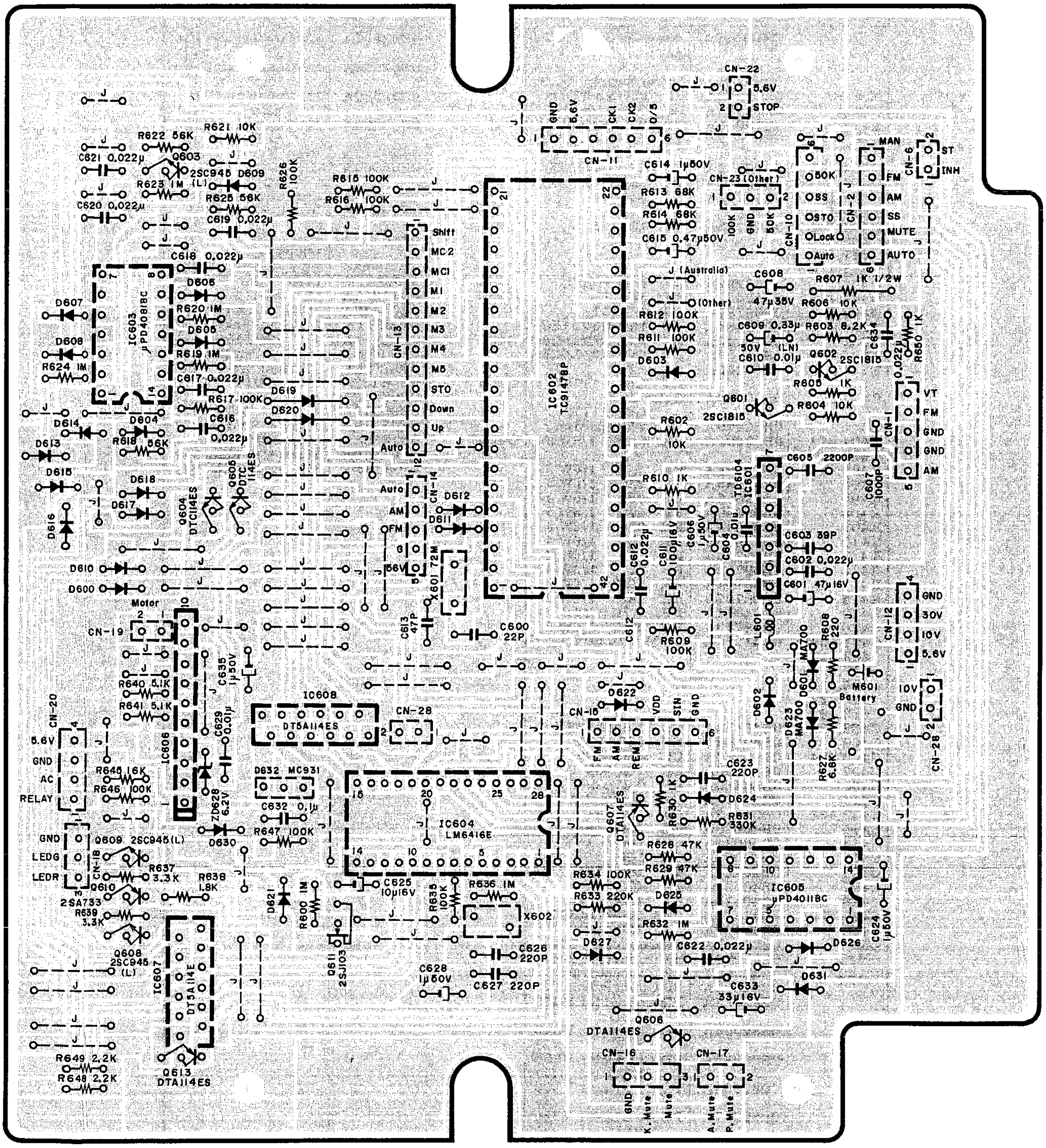

CN-21
AC
AC
C428 47µ50V
AC
GND
B
CN-27
ACA
R420 22K
D416
A
R419 2.7K 1W
ACB
B
C411 1000µ25V
C413 10µ16V
D408 MC931
C415 220µ16V
C414 0.1µ
C403 10000µ63V
R404 2.2K
ICP-N15
IC402
C412 0.1µ
IC403 NJM78M12
D401 RBV602
C430 1000P
D407 BA-108
D405
R402 2.4K
C409 0.1µ
D402
D406
AC-A
C401 0.1µ
C402 0.1µ
AC-B
R403 2.4K
C410 0.1µ
C405 470µ25V
GND
C407 10µ35V
Q401 2SC2240
D404
R401 5.6K
ZD401 15V
ZD402 15V
C406 470µ63V
D403
IC401
ICP-N5
C404 10000µ63V
C429 1000P
GND
30V
10V
56V
C408 0.47µ50V
C420 0.1µ
CN-12
C416 0.1µ
D409 RB-151
ZD403 6.8V
C421 100µ10V
C419 100µ16V
C417 0.1µ
R406 470
Q403 2SD1406
Q408 2SC2002
Relay
AC
GND
5.6V
CN-20
C418 1000µ16V
CONT
AC
13V
GND
CN-7
C427 47µ16V
C424 470µ63V
R405 330
Q402 2SC945
ZD404 6.2V
R418 18K
C423 0.1µ
C422 0.1µ
R415 5.6K
R417 10K
R411 16K
Q407 2SC945
C426 1µ50V
C432 220µ63V
R414 5.6K
R416 5.6K
Q409 2SC945
C431 0.1µ
Q406 2SD1406
D410
D411
D413 MC931
Q405 2SA733
R410 120K
D412 RB-151
R409 30
Q404 2SA733
R412 82 1/2W
A
T2
RY402 Relay A
D414 S5566B
RY401 Relay B
D415 S5566B
D418
D417
TF
SW
Relay A
Relay B
AC IN (−)
AC IN
AC IN
J

Fig. 5.16

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
|  | **BA06599A** | **Power Supply P.C.B. Ass'y** |
|  | 0B60440A | Power Supply P.C.B. |
| IC401 | 0B11248A | IC ICP-N5-T104 |
| IC402 | 0B11335A | IC ICP-N15-T104 |
| Q401 | 0B10078A | TR 2SC2240 (GR) |
| Q402,407<br>409 | 0B01872A | TR 2SC945L (P,Q) |
| Q404,405 | 0B06013A | TR 2SA733 (P,Q) |
| Q408 | 0B06322A | TR 2SC2002 (K,L) |
| D402,403<br>414,415 | 0B12362A | SiD S5566B |
| D404,405<br>406,410<br>411,416<br>417,418 | 0B06398A | SiD 1SS176 |
| D407 | 0B06282A | SiD DBA10B.C. |
| D408,413 | 0B12420A | SiD MC93 |
| D409,412 | 0B06183A | SiD RB-151 |
| ZD401,402 | 0B12464A | ZD 15V UTZJ15C |
| ZD403 | 0B12440A | ZD 6.8V UTZJ6.8C |
| ZD404 | 0B12437A | ZD 6.2V UTZJ6.2C |
| RY401 | 0B90250A | Relay 24V G6C-1117P |
| RY402 | 0B90249A | Relay 12V G6C-1117P |
| T2 | 0B50090A | Power Transformer |
| R401,414<br>415,416 | 0B09695A | RK 5.6K 1/6W J |
| R402,403 | 0B09686A | RK 2.4K 1/6W J |
| R404 | 0B09685A | RK 2.2K 1/6W J |
| R405 | 0B09665A | RK 330 1/6W J |
| R406 | 0B09669A | RK 470 1/6W J |
| R409 | 0B09640A | RK 30 1/6W J |
| R410 | 0B09655A | RK 120 1/6W J |
| R411 | 0B09706A | RK 16K 1/6W J |
| R412 | 0B09253A | RF 82 1/2W J |
| R417 | 0B09701A | RK 10K 1/6W J |
| R418 | 0B09707A | RK 18K 1/6W J |
| R419 | 0B24061A | RF 2.7K 1W J |
| R420 | 0B09709A | RK 22K 1/6W J |
| C401,402<br>409,410<br>412,414<br>416,417<br>420,422<br>423,431 | 0B41298A | CMM 0.1μ 50V J |
| C403,404 | 0B40454A | CE 10000μ 63V |
| C405 | 0B40094A | CE 470μ 25V |
| C406,424 | 0B40134A | CE 470μ 63V |
| C407 | 0B40100A | CE 10μ 35V |
| C408 | 0B40462A | CE 0.47μ 50V |
| C411 | 0B40095A | CE 1000μ 25V |
| C413,426 | 0B01412A | CE 10μ 16V |
| C415 | 0B40079A | CE 220μ 16V |
| C418 | 0B40082A | CE 1000μ 16V |
| C419 | 0B40078A | CE 100μ 16V |
| C421 | 0B40464A | CE 100μ 10V |
| C427 | 0B40077A | CE 47μ 16V |
| C428 | 0B40115A | CE 4.7μ 50V |
| C429,430 | 0B41791A | CSP 1000P 50V J |
| C432 | 0B40132A | CE 220μ 63V |
| CN7 | 0B82947A | 4P Connector WHT |
| CN12 | 0B82952A | 4P Connector WHT |
| CN20 | 0B82960A | 4P Connector RED |
| CN27 | 0B82967A | 3P Connector RED |
|  | 0B82983A | PD Connector V340 RED (1) |
|  | 0B82984A | PD Connector V340 WHT (1) |
|  | 0B82985A | PD Connector V290 RED (1) |
|  | 0B82986A | PD Connector V290 WHT (1) |
|  | 0B82987A | PD Connector V330 BLU (1) |
|  | 0B82988A | PD Connector V300 BLU (2) |
|  | 0B82990A | PD Connector V260 YEL (1) |
|  | 0B82991A | PD Connector V150 RED (2) |
|  | 0B82992A | PD Connector V150 WHT (1) |
|  | 0B82993A | PD Connector V100 BLU (1) |
|  | 0B82996A | PD Connector V150 BLK (2) |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
|  | 0B82997A | PD Connector V150 RED (1) |
|  | 0B82998A | PD Connector V150 ORN (1) |
|  | 0B82999A | PD Connector V150 YEL (2) |
|  | 0B83003A | PD Connector V230 BLU (2) |
|  | 0B80122A | Vinyl Tube (1) |
|  | 0B83000A | GND Cable V070 BLU (1) |
|  | 0B90019A | Insu-Lock SKB80 (7) |
|  | 0B90206A | Insu-Lock SKB4M (1) |
|  | 0E03355A | Earth Lug MET31-0113 (1) |
|  | 0J05309A | BS Damper 1VR (1) |
|  | 0J05362A | Earth Plate (1) |
| IC403 | 0B11252A | IC 78M12 |
|  | 0E00612A | M3x6 ⊕Pan (2A) (1) |
|  | 0J05351A | TR Heat Sink (1) |
| Q403 | 0B06452A | TR 2SD1406 (Y) |
|  | 0E00612A | M3x6 ⊕Pan (2A) (1) |
|  | 0J05351A | TR Heat Sink (1) |
| Q406 | 0B06452A | TR 2SD1406 (Y) |
|  | 0B08680B | Heat Sink A (1) |
|  | 0E00972A | Nut Hex. M3 (1) |
|  | 0E03319A | M3x8 ⊕Binding (1) |
| D401 | 0B12388A | SiD RBV-602 |
|  | 0E03030A | M3x6 ⊕Binding (1) |
|  | 0J05335B | SiD Heat Sink (1) |

## 5.17. Logic P.C.B. Ass'y



CN-22
5.6V
STOP
GND
5.6V
CK1
CK2
D/S
CN-11
R622 56K
R621 10K
C621 0.022μ
Q603
2SC945
D609
R623 1M (L)
R625 56K
C620 0.022μ
C619 0.022μ
R626 100K
R615 100K
R616 100K
C618 0.022μ
IC603
μPD4081BC
D606
D607
R620 1M
D605
D608
R619 1M
R624 1M
C617 0.022μ
D619
R617 100K
D620
D614
D604
C616 0.022μ
D613
R618 56K
D615
D618
D617
D616
Q604 DTC114ES
Q605 DTC114ES
Shift
MC2
MC1
M1
M2
M3
M4
M5
STO
Down
Up
Auto
CN-13
CN-14
AM
FM
56V
D612
D611
X601 7.2M
IC602
TC9147BP
21
22
42
C614 1μ50V
CN-23 (Other)
R613 68K
R614 68K
C615 0.47μ50V
100K
GND
50K
CN-10
J (Australia)
J (Other)
C608 47μ35V
R607 1K 1/2W
R606 10K
R612 100K
R611 100K
C609 0.33μ 50V (LN)
R603 8.2K
C634 0.022μ
R650 1K
D603
C610 0.01μ
Q602 2SC1815
R605 1K
Q601 2SC1815
R604 10K
R602 10K
MAN
CN-6
ST
INH
50K
SS
STO
Lock
Auto
CN-2
FM
AM
SS
MUTE
AUTO
VT
FM
GND
GND
AM
CN-1
C605 2200P
C607 1000P
R610 1K
TD6104
IC601
C612 0.022μ
C611 100μ16V
C606 1μ50V
C604 0.01μ
C603 39P
C602 0.022μ
C601 47μ16V
L601
MA700
D601
R608 220
CN-12
GND
30V
10V
5.6V
M601 Battery
10V
GND
CN-28
C613 47P
C600 22P
R609 100K
Motor
CN-19
C635 1μ50V
R640 5.1K
R641 5.1K
IC606
C629 0.01μ
IC608
DT5A114ES
CN-28
D622
CN-15
VDD
SIN
GND
FM
AM
REM
D602
D623 MA700
R627 6.8K
CN-20
5.6V
GND
AC
RELAY
R645 16K
R646 100K
ZD628 6.2V
D632 MC931
C632 0.1μ
R647 100K
D630
IC604
LM6416E
15
20
25
28
14
10
5
1
C623 220P
D624
Q607 DTA114ES
R630 1K
R631 330K
GND
LEDG
LEDR
CN-18
Q609 2SC945(L)
R637 3.3K
Q610 2SA733
R638 1.8K
R639 3.3K
Q608 2SC945 (L)
IC607
DT5A114E
D621
R600 1M
C625 10μ16V
R635 100K
R636 1M
X602
Q611 2SJ103
C626 220P
C628 1μ50V
C627 220P
R628 47K
R629 47K
R634 100K
R633 220K
D625
R632 1M
D627
C622 0.022μ
IC605
μPD4011BC
C624 1μ50V
D626
D631
C633 33μ16V
Q606 DTA114ES
CN-16
CN-17
GND
K.Mute
Mute
A.Mute
P.Mute
R649 2.2K
R648 2.2K
Q613 DTA114ES
J

Fig. 5.17

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
|  | **BA06610A** | **Logic P.C.B. Ass'y (SR-4A & SR-4 (Canada & Australia))** |
|  | **BA06621A** | **Logic P.C.B. Ass'y (SR-4 (Other))** |
|  | 0B60439A | Logic P.C.B. |
| IC601 | 0B11159A | IC TD6104 |
| IC602 | 0B11161A | IC TC9147BP |
| IC603 | 0B06219A | IC μPD4081BC |
| IC604 | 0B11279A | IC LM6416E |
| IC605 | 0B06178A | IC μPD4011BC |
| IC606 | 0B11250A | IC LB1645N |
| IC607,608 | 0B11334A | IC DT5A114E |
| Q601,602 | 0B10088A | TR 2SC1815L (GR) |
| Q603,608<br>609 | 0B01872A | TR 2SC945L (P,Q) |
| Q604,605 | 0B10068A | TR DTC114ES |
| Q606,607<br>613 | 0B10058A | TR DTA114ES |
| Q610 | 0B06013A | TR 2SA733 (P,Q) |
| Q611 | 0B10211A | FET 2SJ103 (GR,BL) |
| D600<br>602-618<br>621,622<br>624,625<br>626,627<br>630,631 | 0B06398A | SiD 1SS176 (26) |
| D601,623 | 0B12363A | SiD MA700 |
| D619,620 | 0B06181A | SiD 1SS53 |
| D632 | 0B12420A | SiD MC931 |
| ZD628 | 0B12437A | ZD 6.2V UTZJ6.2C |
| L601 | 0B51239A | Micro Coil LAL02T220K |
| X601 | 0B92006A | Crystal 7.2MHz FYX-TE725S17 |
| X602 | 0B02307A | Resonator 800kHz KBR800H |
| M601 | 0B40241A | Lithium Battery 3V CR2330-1GV5 |
| R600,619<br>620,623<br>624,632<br>636 | 0B09749A | RK 1M 1/6W J |
| R602,604<br>606,621 | 0B09701A | RK 10K 1/6W J |
| R603 | 0B09699A | RK 8.2K 1/6W J |
| R605,610<br>630,650 | 0B09677A | RK 1K 1/6W J |
| R607 | 0B24114A | RK 1K 1/2W J |
| R608 | 0B09661A | RK 220 1/6W J |
| R609,611<br>612,615<br>616,617<br>626,634<br>635,646<br>647 | 0B09725A | RK 100K 1/6W J |
| R613,614 | 0B09721A | RK 68K 1/6W J |
| R618,622<br>625 | 0B09719A | RK 56K 1/6W J |
| R627 | 0B09697A | RK 6.8K 1/6W J |
| R628,629 | 0B09717A | RK 47K 1/6W J |
| R631 | 0B09737A | RK 330K 1/6W J |
| R633 | 0B09733A | RK 220K 1/6W J |
| R637,639 | 0B09689A | RK 3.3K 1/6W J |
| R638 | 0B09683A | RK 1.8K 1/6W J |
| R640,641 | 0B09694A | RK 5.1K 1/6W J |
| R645 | 0B09706A | RK 16K 1/6W J |
| R648,649 | 0B09685A | RK 2.2K 1/6W J |
| C600 | 0B41708A | CC 22P 50V J |
| C601 | 0B01403A | CE 47μ 16V |
| C602,612<br>616-621<br>634 | 0B41787A | CC 0.022μ 25V Z (9) |
| C603 | 0B41187A | CC 39P 50V J |
| C604,629 | 0B41553A | CC 0.01μ 25V Z |
| C605 | 0B09586A | CC 2200P 50V K |
| C606,614<br>624,628<br>635 | 0B01405A | CE 1μ 50V |
| C607 | 0B09288A | CC 1000P 50V K |
| C608 | 0B40103A | CE 47μ 35V |
| C609 | 0B09327A | CE 0.33μ 50V (LN) |
| C610,632 | 0B41298A | CMM 0.1μ 50V J |
| C611 | 0B01400A | CE 100μ 16V |
| C613 | 0B41709A | CC 47P 50V J |
| C615 | 0B40111A | CE 0.47μ 50V |
| C622 | 0B41290A | CMM 0.022μ 50V J |
| C623 | 0B41278A | CMM 2200P 50V J |
| C625 | 0B01412A | CE 10μ 16V |
| C626,627 | 0B41734A | CC 220P 50V J |
| C633 | 0B40076A | CE 33μ 16V |
| CN1 | 0B81238A | 5P-T Post YEL |
| CN2 | 0B81242A | 6P-T Post YEL |
| CN6 | 0B81226A | 2P-T Post YEL |
| CN10 | 0B81241A | 6P-T Post RED |
| CN11 | 0B81239A | 6P-T Post WHT |
| CN12 | 0B81231A | 4P-T Post WHT |
| CN13 | 0B81263A | 12P-T Post WHT |
| CN14 | 0B81235A | 5P-T Post WHT |
| CN15 | 0B81240A | 6P-T Post BLK |
| CN16 | 0B81230A | 3P-T Post YEL |
| CN17 | 0B81223A | 2P-T post WHT |
| CN18 | 0B81229A | 3P-T Post RED |
| CN19 | 0B81225A | 2P-T Post RED |
| CN20 | 0B81233A | 4P-T Post RED |
| CN22 | 0B81224A | 2P-T Post BLK |
| CN23 | 0B81227A | 3P-T Post WHT (SR-4 (Other)) |
| CN28 | 0B82979A | 2P Connector |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
|  | BA06609A | Tuner P.C.B. Ass'y (SR-4A & SR-4 (Canada)) |
|  | — FM — |  |
| IC301 | 0B11156A | IC TA7060AP |
| IC302 | 0B11157A | IC LA1235 |
| Q301 | 0B10127A | FET 2SK241 (GR) |
| Q302 | 0B10174A | TR 2SC2669 (O,Y) |
| Q303,304 305 | 0B01872A | TR 2SC945L (P,Q) |
| D301,302 303,304 305,306 | 0B06398A | SiD 1SS176 |
| VR301,303 | 0B32084A | Semi VR 47K (B) |
| VR302 | 0B32080A | Semi VR 10K (B) |
| L301,302 303,304 | 0B51239A | Micro Coil 22μH |
| L305 | 0B51240A | FM Det. Coil A |
| L306 | 0B51241A | FM Det. Coil B |
| L307,308 | 0B51243A | Choke Coil |
| FE301 | 0B91016A | Front-end |
| R301 | 0B09725A | RK 100K 1/6W J |
| R302 | 0B09721A | RK 68K 1/6W J |
| R303,325 | 0B09727A | RK 120K 1/6W J |
| R304,318 324,329 | 0B09677A | RK 1K 1/6W J |
| R305 | 0B09745A | RK 680K 1/6W J |
| R306,311 317 | 0B09665A | RK 330 1/6W J |
| R307,312 | 0B09645A | RK 47 1/6W J |
| R308,313 315,316 | 0B09667A | RK 390 1/6W J |
| R309 | 0B09698A | RK 7.5K 1/6W J |
| R310 | 0B09686A | RK 2.4K 1/6W J |
| R319,321 | 0B09701A | RK 10K 1/6W J |
| R320 | 0B09719A | RK 56K 1/6W J |
| R322 | 0B09699A | RK 8.2K 1/6W J |
| R323 | 0B25228A | RM 2.21K 1/6W F |
| R326 | 0B09705A | RK 15K 1/6W J |
| R327 | 0B09669A | RK 470 1/6W J |
| R328 | 0B09693A | RK 4.7K 1/6W J |
| R330 | 0B09717A | RK 47K 1/6W J |
| CF301,302 | 0B41700A | Ceramic Filter SFE10.7MX2H-A |
| CT307 | 0B41614A | C Trimmer 30P |
| C301,303 305,306 308,309 310,311 312,316 317,318 324,326 329,335 336,338 620,622 | 0B41787A | CC 0.022μ 25V Z |
| C302 | 0B41294A | CMM 0.047μ 50V J |
| C304 | 0B40420A | CE 220μ 16V (LN) |
| C313,314 | 0B41290A | CMM 0.022μ 50V J |
| C315 | 0B40079A | CE 220μ 16V |
| C319 | 0B01402A | CE 4.7μ 25V |
| C321 | 0B09372A | CE 2.2μ 50V |
| C323,327 337 | 0B01405A | CE 1μ 50V |
| C325 | 0B41071A | CC 100P 50V J |
| C328 | 0B40066A | CE 330μ 10V |
| C330,332 334 | 0B09280A | CC 47P 50V J |
| C331 | 0B41007A | CC 1000P 25V M |
| C333 | 0B09379A | CC 560P 50V K |
|  | 0B81596A | Antenna Terminal F (1) |
|  | — AM — |  |
| IC501 | 0B11243A | IC LA1247 |
| Q501 | 0B06129A | FET 2SK117 (Y) |
| Q502 | 0B01872A | TR 2SC945L (P,Q) |
| D501 | 0B12386A | Vari-Cap. KV1226Y |
| D502 | 0B12363A | SiD MA700 |
| D503 | 0B12420A | SiD MC931 |
| L501 | 0B51236A | Antenna Coil |
| L502 | 0B51235A | Osc. Coil |
| L503 | 0B51234A | AM IFT2 |
| L504 | 0B51233A | AM IFT1 |
| L505,506 | 0B51239A | Micro Coil LAL02TA220K |
| VR501 | 0B32086A | Semi VR 100K (B) |
| R501,516 | 0B09677A | RK 1K 1/6W J |
| R502,504 518 | 0B09725A | RK 100K 1/6W J |
| R503,508 517 | 0B09685A | RK 2.2K 1/6W J |
| R505 | 0B09665A | RK 330 1/6W J |
| R506 | 0B09661A | RK 220 1/6W J |
| R507 | 0B09681A | RK 1.5K 1/6W J |
| R509 | 0B09674A | RK 750 1/6W J |
| R510 | 0B09651A | RK 82 1/6W J |
| R511 | 0B09733A | RK 220K 1/6W J |
| R512,513 515 | 0B09701A | RK 10K 1/6W J |
| R514 | 0B09708A | RK 20K 1/6W J |
| CF501 | 0B41701A | Ceramic Filter SFZ450G3L |
| CF502 | 0B92003A | Resonator 450 kHz BFU450C4N |
| CT502,506 | 0B42005A | C Trimmer 20P |
| C501,505 508,509 511,512 514,515 517,522 526 | 0B41787A | CC 0.022μ 25V Z |
| C504 | 0B41401A | CP 430P 50V J |
| C510,513 519 | 0B41007A | CC 1000P 25V M |
| C516 | 0B41711A | CC 82P 50V K |
| C518,529 | 0B01403A | CE 47μ 16V |
| C520,521 | 0B01402A | CE 4.7μ 25V |
| C523 | 0B40111A | CE 0.47μ 50V |
| C524 | 0B41553A | CC 0.01μ 25V Z |
| C525 | 0B09372A | CE 2.2μ 50V |
| C527 | 0B09586A | CC 2200P 50V K |
| C528 | 0B41296A | CMM 0.068μ 50V J |
|  | — Control — |  |
| IC651 | 0B06219A | IC μPD4081BC |
| Q651 | 0B01872A | TR 2SC945L (P,Q) |
| Q652 | 0B10062A | TR DTC144ES |
| Q653,660 661 | 0B10058A | TR DTA114ES |
| Q654,655 656,657 658,659 | 0B10068A | TR DTC114ES |
| D651,652 658,660 661,662 663 | 0B06398A | SiD 1SS176 |
| D659 | 0B06181A | SiD 1SS53 |
| R651,654 | 0B01889A | RK 100K 1/4W J |
| R652,657 658 | 0B09701A | RK 10K 1/6W J |
| R653 | 0B09707A | RK 18K 1/6W J |
| R655,656 | 0B09717A | RK 47K 1/6W J |
| C651 | 0B01405A | CE 1μ 50V |
|  | — Miscellaneous — |  |
|  | 0B60438A | Tuner P.C.B. |
| CN1 | 0B82941A | 5P Connector YEL |
| CN2 | 0B82942A | 6P Connector YEL |
| CN3 | 0B81227A | 3P-T Post WHT |
| CN4 | 0B81230A | 3P-T Post YEL |
| CN5 | 0B82945A | 2P Connector WHT |
| CN9 | 0B81238A | 5P-T Post YEL |
| CN22 | 0B82962A | 2P Connector BLK |
| TP1,2 | 0B81634A | 2P-T Post |
|  | 0J05326B | Earth Plate (1) |

**5.18. Tuner P.C.B. Ass'y**
**(1) For SR-4A and SR-4 (Canada)**

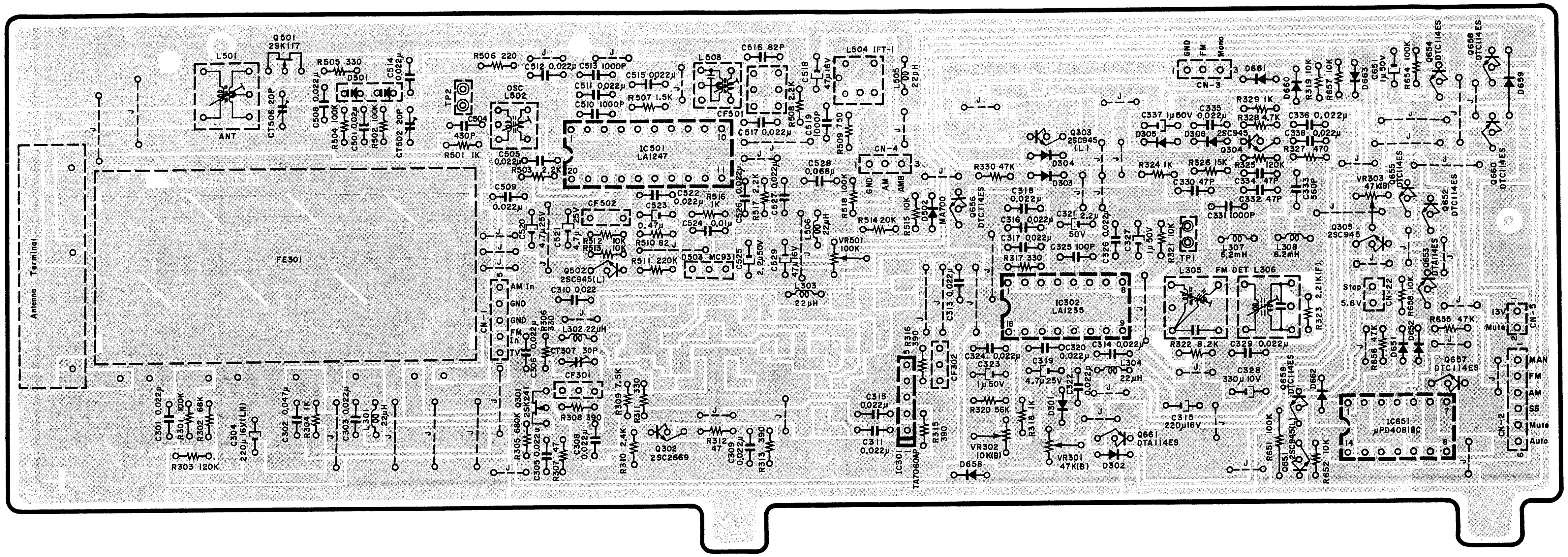

L501
ANT
Q301 2SK117
Antenna Terminal
FE301
CT506 20P
CT502 20P
TP2
OSC L502
R501 1K
R506 220
IC501 LA1247
CF502
CF501
L503
L504 IFT-1
CN-4
GND
AM
AMB
VR501 100K
Q502 2SC945(L)
D503 MC931
CN-1
AM In
GND
GND
FM In
TV
CF301
L302 22μH
Q302 2SC2669
IC301 TA7060P
CF302
IC302 LA1235
TP1
L305 FM DET L306
L307 6.2mH
L308 6.2mH
VR301 47K(B)
VR302 10K(B)
VR303 47K(B)
Q303 2SC945(L)
Q304
Q305 2SC945
Q661 DTA114ES
CN-3
GND
FM
Mono
IC651 μPD4081BC
CN-2
MAN
FM
AM
SS
Mute
Auto
CN-5
13V
Mute
Stop
5.6V
CN-22
Q657 DTC114ES
Q658 DTC114ES
Q660 DTC114ES
D659
R303 120K
C304 220μ16V(LN)
L301 22μH

Fig. 5.18.1

### (2) For SR-4 (Australia)

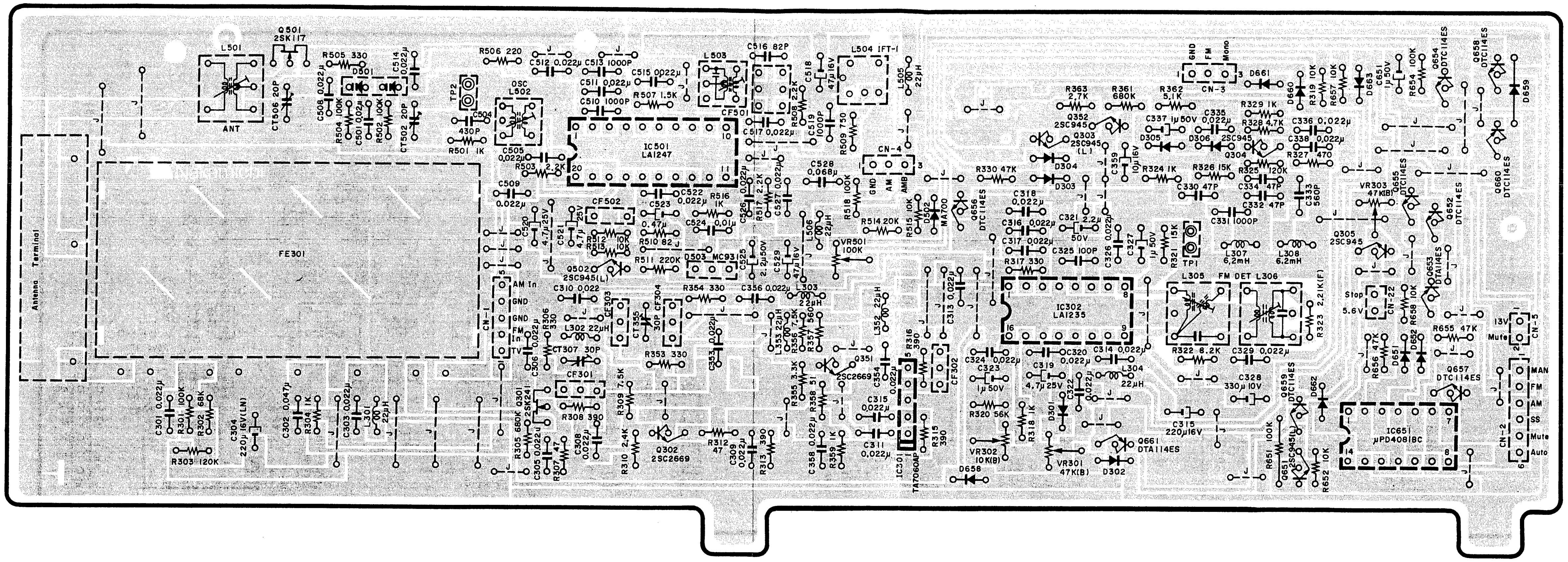


Fig. 5.18.2

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
|  | BA06620A | Tuner P.C.B. Ass'y (SR-4 (Australia)) |
|  | — FM — |  |
| IC301 | 0B11156A | IC TA7060AP |
| IC302 | 0B11157A | IC LA1235 |
| Q301 | 0B10127A | FET 2SK241 (GR) |
| Q302,351 | 0B10174A | TR 2SC2669 (O,Y) |
| Q303,304<br>305,352 | 0B01872A | TR 2SC945L (P,Q) |
| D301,302<br>303,304<br>305,306 | 0B06398A | SiD 1SS176 |
| VR301,303 | 0B32084A | Semi VR 47K (B) |
| VR302 | 0B32080A | Semi VR 10K (B) |
| L301,302<br>303,304<br>352,353 | 0B51239A | Micro Coil 22μH |
| L305 | 0B51240A | FM Det. Coil A |
| L306 | 0B51241A | FM Det. Coil B |
| L307,308 | 0B51243A | Choke Coil |
| FE301 | 0B91016A | Front-end |
| R301 | 0B09725A | RK 100K 1/6W J |
| R302 | 0B09721A | RK 68K 1/6W J |
| R303,325 | 0B09727A | RK 120K 1/6W J |
| R304,318<br>324,329<br>359 | 0B09677A | RK 1K 1/6W J |
| R305,361 | 0B09745A | RK 680K 1/6W J |
| R306,317<br>353,354 | 0B09665A | RK 330 1/6W J |
| R307,312 | 0B09645A | RK 47 1/6W J |
| R308,313<br>315,316 | 0B09667A | RK 390 1/6W J |
| R309,356 | 0B09698A | RK 7.5K 1/6W J |
| R310 | 0B09686A | RK 2.4K 1/6W J |
| R319 | 0B09701A | RK 10K 1/6W J |
| R320 | 0B09719A | RK 56K 1/6W J |
| R321,326 | 0B09705A | RK 15K 1/6W J |
| R322 | 0B09699A | RK 8.2K 1/6W J |
| R323 | 0B25228A | RM 2.21K 1/6W F |
| R327 | 0B09669A | RK 470 1/6W J |
| R328 | 0B09693A | RK 4.7K 1/6W J |
| R330 | 0B09717A | RK 47K 1/6W J |
| R355 | 0B09689A | RK 3.3K 1/6W J |
| R357 | 0B09671A | RK 560 1/6W J |
| R358 | 0B09646A | RK 51 1/6W J |
| R362 | 0B09694A | RK 5.1K 1/6W J |
| R363 | 0B09687A | RK 2.7K 1/6W J |
| CF301,302 | 0B41700A | Ceramic Filter SFE10.7MX2H-A |
| CF303,304 | 0B41746A | Ceramic Filter SFE10.7MS3GH15A |
| CT307,355 | 0B41614A | C Trimmer 30P |
| C301,303<br>305,306<br>308,309<br>310,311<br>312,316<br>317,318<br>324,326<br>329,335<br>336,338<br>353,354<br>356,358<br>620,622 | 0B41787A | CC 0.022μ 25V Z |
| C302 | 0B41294A | CMM 0.047μ 50V J |
| C304 | 0B40420A | CE 220μ 18V (LN) |
| C313,314 | 0B41290A | CMM 0.022μ 50V J |
| C315 | 0B40079A | CE 220μ 16V |
| C319 | 0B01402A | CE 4.7μ 25V |
| C321 | 0B09372A | CE 2.2μ 50V |
| C323,327<br>337 | 0B01405A | CE 1μ 50V |
| C325 | 0B41071A | CC 100P 50V J |
| C328 | 0B40066A | CE 330μ 10V |
| C330,332<br>334 | 0B09280A | CC 47P 50V J |
| C331 | 0B41007A | CC 1000P 25V M |
| C333 | 0B09379A | CC 560P 50V K |
| C359 | 0B09816A | CE 10μ 16V (LN) |
|  | 0B81596A | Antenna Terminal F (1) |
|  | — AM — |  |
| IC501 | 0B11243A | IC LA1247 |
| Q501 | 0B06129A | FET 2SK117 (Y) |
| Q502 | 0B01872A | TR 2SC945L (P,Q) |
| D501 | 0B12386A | Vari-Cap. KV1226Y |
| D502 | 0B12363A | SiD MA700 |
| D503 | 0B12420A | SiD MC931 |
| L501 | 0B51236A | Antenna Coil |
| L502 | 0B51235A | Osc. Coil |
| L503 | 0B51234A | AM IFT2 |
| L504 | 0B51233A | AM IFT1 |
| L505,506 | 0B51239A | Micro Coil LAL02TA220K |
| VR501 | 0B32086A | Semi VR 100K (B) |
| R501,516 | 0B09677A | RK 1K 1/6W J |
| R502,504<br>518 | 0B09725A | RK 100K 1/6W J |
| R503,508<br>517 | 0B09685A | RK 2.2K 1/6W J |
| R505 | 0B09665A | RK 330 1/6W J |
| R506 | 0B09661A | RK 220 1/6W J |
| R507 | 0B09681A | RK 1.5K 1/6W J |
| R509 | 0B09674A | RK 750 1/6W J |
| R510 | 0B09651A | RK 82 1/6W J |
| R511 | 0B09733A | RK 220K 1/6W J |
| R512,513<br>515 | 0B09701A | RK 10K 1/6W J |
| R514 | 0B09708A | RK 20K 1/6W J |
| CF501 | 0B41701A | Ceramic Filter SFZ450G3L |
| CF502 | 0B92003A | Resonator 450 kHz BFU450C4N |
| CT502,506 | 0B42005A | C Trimmer 20P |
| C501,505<br>508,509<br>511,512<br>514,515<br>517,522<br>526 | 0B41787A | CC 0.022μ 25V Z |
| C504 | 0B41401A | CP 430P 50V J |
| C510,513<br>519 | 0B41007A | CC 1000P 25V M |
| C516 | 0B41711A | CC 82P 50V K |
| C518,529 | 0B01403A | CE 47μ 16V |
| C520,521 | 0B01402A | CE 4.7μ 25V |
| C523 | 0B40111A | CE 0.47μ 50V |
| C524 | 0B41553A | CC 0.01μ 25V Z |
| C525 | 0B09372A | CE 2.2μ 50V |
| C527 | 0B09586A | CC 2200P 50V K |
| C528 | 0B41296A | CMM 0.068μ 50V J |
|  | — Control — |  |
| IC651 | 0B06219A | IC μPD4081BC |
| Q651 | 0B01872A | TR 2SC945L (P,Q) |
| Q652 | 0B10062A | TR DTC144ES |
| Q653,660<br>661 | 0B10058A | TR DTA114ES |
| Q654,655<br>656,657<br>658,659 | 0B10068A | TR DTC114ES |
| D651,652<br>658,660<br>661,662<br>663 | 0B06398A | SiD 1SS176 |
| D659 | 0B06181A | SiD 1SS53 |
| R651,654 | 0B01889A | RK 100K 1/4W J |
| R652,657<br>658 | 0B09701A | RK 10K 1/6W J |
| R653 | 0B09707A | RK 18K 1/6W J |
| R655,656 | 0B09717A | RK 47K 1/6W J |
| C651 | 0B01405A | CE 1μ 50V |
|  | — Miscellaneous — |  |
|  | 0B60438A | Tuner P.C.B. |
| CN1 | 0B82941A | 5P Connector YEL |
| CN2 | 0B82942A | 6P Connector YEL |
| CN3 | 0B81227A | 3P-T Post WHT |
| CN4 | 0B81230A | 3P-T Post YEL |
| CN5 | 0B82945A | 2P Connector WHT |
| CN9 | 0B81238A | 5P-T Post YEL |
| CN22 | 0B82962A | 2P Connector BLK |
| TP1,2 | 0B81634A | 2P-T Post |
|  | 0J05326B | Earth Plate (1) |

### (3) For SR-4 (Other)

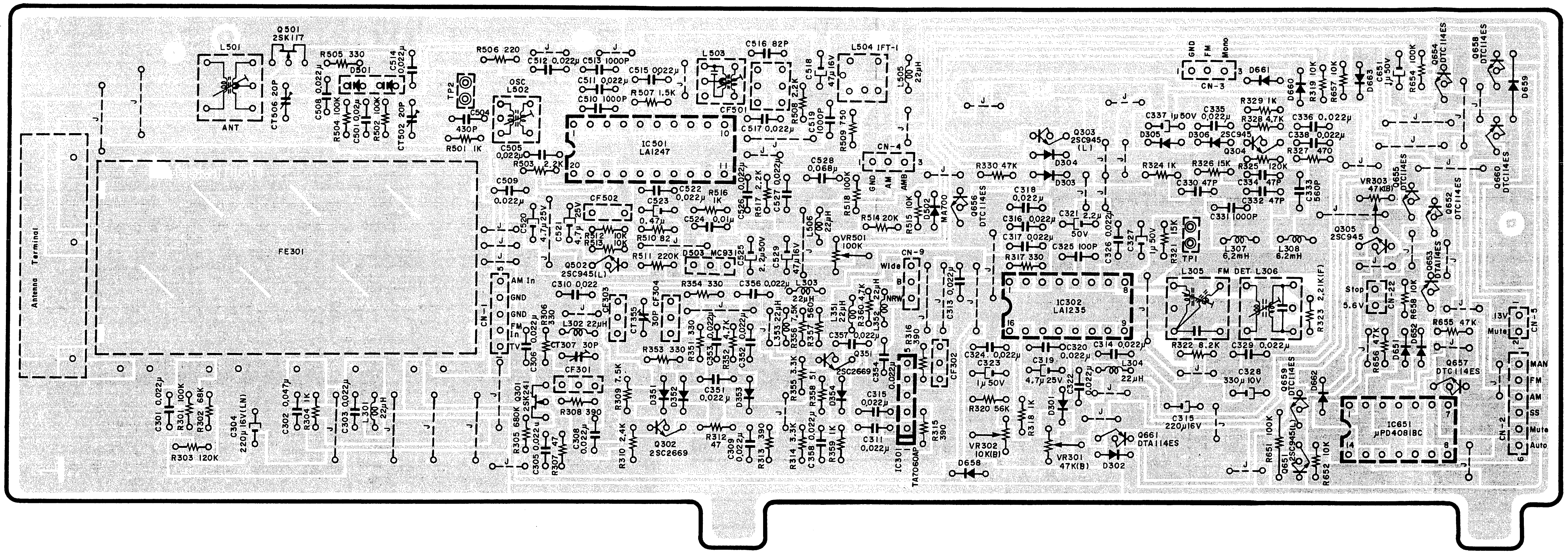
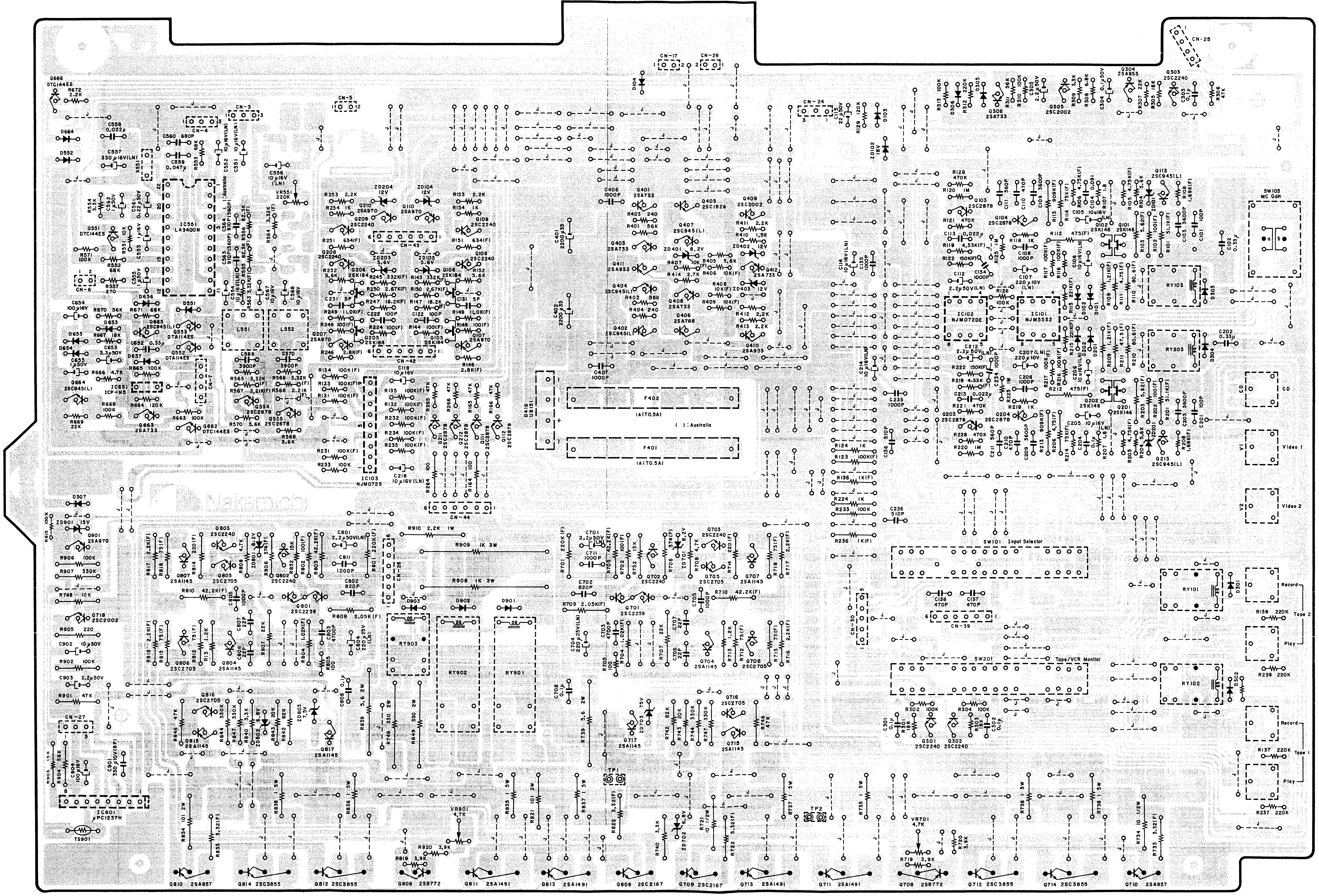


Fig. 5.18.3

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06619A | Tuner P.C.B. Ass'y (SR-4 (Other)) |
| | — FM — | |
| IC301 | 0B11156A | IC TA7060AP |
| IC302 | 0B11157A | IC LA1235 |
| Q301 | 0B10127A | FET 2SK241 (GR) |
| Q302,351 | 0B10174A | TR 2SC2669 (O,Y) |
| Q303,304 305 | 0B01872A | TR 2SC945L (P,Q) |
| D301,302 303,304 305,306 351,352 353,354 | 0B06398A | SiD 1SS176 |
| VR301,303 | 0B32084A | Semi VR 47K (B) |
| VR302 | 0B32080A | Semi VR 10K (B) |
| L301,302 303,304 351,352 353 | 0B51239A | Micro Coil 22μH |
| L305 | 0B51240A | FM Det. Coil A |
| L306 | 0B51241A | FM Det. Coil B |
| L307,308 | 0B51243A | Choke Coil |
| FE301 | 0B91016A | Front-end |
| R301 | 0B09725A | RK 100K 1/6W J |
| R302 | 0B09721A | RK 68K 1/6W J |
| R303,325 | 0B09727A | RK 120K 1/6W J |
| R304,318 324,329 359 | 0B09677A | RK 1K 1/6W J |
| R305 | 0B09745A | RK 680K 1/6W J |
| R306,317 351,353 354 | 0B09665A | RK 330 1/6W J |
| R307,312 | 0B09645A | RK 47 1/6W J |
| R308,313 315,316 | 0B09667A | RK 390 1/6W J |
| R309,356 | 0B09698A | RK 7.5K 1/6W J |
| R310 | 0B09686A | RK 2.4K 1/6W J |
| R314,355 | 0B09689A | RK 3.3K 1/6W J |
| R319 | 0B09701A | RK 10K 1/6W J |
| R320 | 0B09719A | RK 56K 1/6W J |
| R321,326 | 0B09705A | RK 15K 1/6W J |
| R322 | 0B09699A | RK 8.2K 1/6W J |
| R323 | 0B25228A | RM 2.21K 1/6W F |
| R327 | 0B09669A | RK 470 1/6W J |
| R328,352 360 | 0B09693A | RK 4.7K 1/6W J |
| R330 | 0B09717A | RK 47K 1/6W J |
| R357 | 0B09671A | RK 560 1/6W J |
| R358 | 0B09646A | RK 51 1/6W J |
| CF301,302 | 0B41700A | Ceramic Filter SFE10.7MX2H-A |
| CF303,304 | 0B41746A | Ceramic Filter SFE10.7MS3GH15A |
| CT307,355 | 0B41614A | C Trimmer 30P |
| C301,303 305,306 308,309 310,311 312,316 317,318 324,326 329,335 336,338 351,352 353,354 356,357 358,620 622 | 0B41787A | CC 0.022μ 25V Z |
| C302 | 0B41294A | CMM 0.047μ 50V J |
| C304 | 0B40420A | CE 220μ 16V (LN) |
| C313,314 | 0B41290A | CMM 0.022μ 50V J |
| C315 | 0B40079A | CE 220μ 16V |
| C319 | 0B01402A | CE 4.7μ 25V |
| C321 | 0B09372A | CE 2.2μ 50V |
| C323,327 337 | 0B01405A | CE 1μ 50V |
| C325 | 0B41071A | CC 100P 50V J |
| C328 | 0B40066A | CE 330μ 10V |
| C330,332 334 | 0B09280A | CC 47P 50V J |
| C331 | 0B41007A | CC 1000P 25V M |
| C333 | 0B09379A | CC 560P 50V K |
| CN9 | 0B81229A | 3P-T Post RED |
| | 0B81596A | Antenna Terminal F (1) |
| | — AM — | |
| IC501 | 0B11243A | IC LA1247 |
| Q501 | 0B06129A | FET 2SK117 (Y) |
| Q502 | 0B01872A | TR 2SC945L (P,Q) |
| D501 | 0B12386A | Vari-Cap. KV1226Y |
| D502 | 0B12363A | SiD MA700 |
| D503 | 0B12420A | SiD MC931 |
| L501 | 0B51236A | Antenna Coil |
| L502 | 0B51235A | Osc. Coil |
| L503 | 0B51234A | AM IFT2 |
| L504 | 0B51233A | AM IFT1 |
| L505,506 | 0B51239A | Micro Coil LAL02TA220K |
| VR501 | 0B32086A | Semi VR 100K (B) |
| R501,516 | 0B09677A | RK 1K 1/6W J |
| R502,504 518 | 0B09725A | RK 100K 1/6W J |
| R503,508 517 | 0B09685A | RK 2.2K 1/6W J |
| R505 | 0B09665A | RK 330 1/6W J |
| R506 | 0B09661A | RK 220 1/6W J |
| R507 | 0B09681A | RK 1.5K 1/6W J |
| R509 | 0B09674A | RK 750 1/6W J |
| R510 | 0B09651A | RK 82 1/6W J |
| R511 | 0B09733A | RK 220K 1/6W J |
| R512,513 515 | 0B09701A | RK 10K 1/6W J |
| R514 | 0B09708A | RK 20K 1/6W J |
| CF501 | 0B41701A | Ceramic Filter SFZ450G3L |
| CF502 | 0B92003A | Resonator 450 kHz BFU450C4N |
| CT502,506 | 0B42005A | C Trimmer 20P |
| C501,505 508,509 511,512 514,515 517,522 526 | 0B41787A | CC 0.022μ 25V Z |
| C504 | 0B41401A | CP 430P 50V J |
| C510,513 519 | 0B41007A | CC 1000P 25V M |
| C516 | 0B41711A | CC 82P 50V K |
| C518,529 | 0B01403A | CE 47μ 16V |
| C520,521 | 0B01402A | CE 4.7μ 25V |
| C523 | 0B40111A | CE 0.47μ 50V |
| C524 | 0B41553A | CC 0.01μ 25V Z |
| C525 | 0B09372A | CE 2.2μ 50V |
| C527 | 0B09586A | CC 2200P 50V K |
| C528 | 0B41296A | CMM 0.068μ 50V J |
| | — Control — | |
| IC651 | 0B06219A | IC μPD4081BC |
| Q651 | 0B01872A | TR 2SC945L (P,Q) |
| Q652 | 0B10062A | TR DTC144ES |
| Q653,660 661 | 0B10058A | TR DTA114ES |
| Q654,655 656,657 658,659 | 0B10068A | TR DTC114ES |
| D651,652 658,660 661,662 663 | 0B06398A | SiD 1SS176 |
| D659 | 0B06181A | SiD 1SS53 |
| R651,654 | 0B01889A | RK 100K 1/4W J |
| R652,657 658 | 0B09701A | RK 10K 1/6W J |
| R653 | 0B09707A | RK 18K 1/6W J |
| R655,656 | 0B09717A | RK 47K 1/6W J |
| C651 | 0B01405A | CE 1μ 50V |
| | — Miscellaneous — | |
| | 0B60438A | Tuner P.C.B. |
| CN1 | 0B82941A | 5P Connector YEL |
| CN2 | 0B82942A | 6P Connector YEL |
| CN3 | 0B81227A | 3P-T Post WHT |
| CN4 | 0B81230A | 3P-T Post YEL |
| CN5 | 0B82945A | 2P Connector WHT |
| CN9 | 0B81238A | 5P-T Post YEL |
| CN22 | 0B82962A | 2P Connector BLK |
| TP1,2 | 0B81634A | 2P-T Post |
| | 0J05326B | Earth Plate (1) |

5.19. Main P.C.B. Ass'y

(1) For SR-4A and SR-4 (Canada & Australia)



CN-17
CN-29
CN-25
CN-3
CN-4
CN-5
CN-6
CN-7
CN-24
CN-26
CN-27
CN-39
CN-42
CN-43
CN-44
IC551 LA3400N
IC102 NJM072DE
IC101 NJM5532
IC103 NJM072S
IC651 ICP-N5
IC901 μPC1237H
TS901
SW105 MC Gain
SW101 Input Selector
SW201 Tape/VCR Monitor
RY101
RY102
RY103
RY203
RY901
RY902
RY903
F401 1A(T0.5A)
F402 1A(T0.5A)
( ) : Australia
C401 2200μ35
C402 2200μ35
D416 U815I
L551
L552
VR551 220K
VR701 4.7K
VR801 4.7K
TP1
TP2
CD
Video 1
Video 2
Record
Play
Tape 2
Tape 1
R139 220K
R239 220K
R137 220K
R237 220K
R909 1K 3W
R908 1K 3W
R910 2.2K 1W
Q810 2SA957
Q814 2SC3855
Q812 2SC3855
Q808 2SB772
Q811 2SA1491
Q813 2SA1491
Q809 2SC2167
Q709 2SC2167
Q713 2SA1491
Q711 2SA1491
Q708 2SB772
Q712 2SC3855
Q714 2SC3855
Q710 2SA957
Q666 DTC144ES
Q663 2SA733
Q662 DTC144ES
Q664 2SC945(L)
Q901 2SA970
Q718 2SC2002
Nakamichi

Fig. 5.19.1

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | **BA06594A** | **Main P.C.B. Ass'y (SR-4A & SR-4 (Canada))** |
| | **BA06595A** | **Main P.C.B. Ass'y (SR-4 (Australia))** |
| | **— MPX —** | |
| IC551 | 0B11245A | IC LA3400N |
| IC651 | 0B11248A | IC ICP-N5-T104 |
| Q551,662 666 | 0B10062A | TR DTC144ES |
| Q552,553 | 0B10058A | TR DTA114ES |
| Q554,555 | 0B06299A | TR 2SC2878 |
| Q663 | 0B06013A | TR 2SA733 (P,Q) |
| Q664,665 | 0B01872A | TR 2SC945L (P,Q) |
| D551,552 650,653 654,655 656,657 664 | 0B06398A | SiD 1SS176 |
| L551,552 | 0B51237A | MPX Filter TF-1042B-1013-00 |
| VR551 | 0B32066A | Semi VR 220K (B) |
| X551 | 0B90172A | Ceramic Filter CSB456F11 |
| R551 | 0B09701A | RK 10K 1/6W J |
| R552,553 671 | 0B09721A | RK 68K 1/6W J |
| R554 | 0B09689A | RK 3.3K 1/6W J |
| R555,556 | 0B25379A | RM 82.5K 1/6W F |
| R557 | 0B09663A | RK 270 1/6W J |
| R563,564 565,566 | 0B25245A | RM 3.32K 1/6W F |
| R567,568 | 0B25228A | RM 2.21K 1/6W F |
| R569,570 | 0B09695A | RK 5.6K 1/6W J |
| R571,663 665,668 | 0B09725A | RK 100K 1/6W J |
| R664 | 0B09727A | RK 120K 1/6W J |
| R666 | 0B09693A | RK 4.7K 1/6W J |
| R667 | 0B09707A | RK 18K 1/6W J |
| R669 | 0B09709A | RK 22K 1/6W J |
| R670 | 0B09719A | RK 56K 1/6W J |
| R672 | 0B09685A | RK 2.2K 1/6W J |
| C551,552 554,556 | 0B09816A | CE 10μ 16V (LN) |
| C553,555 562,655 | 0B01405A | CE 1μ 50V |
| C557 | 0B40418A | CE 330μ16V (LN) |
| C558 | 0B41290A | CMM 0.022μ 50V J |
| C559 | 0B41555A | CC 0.047μ 25V Z |
| C560 | 0B09287A | CC 680P 50V K |
| C561 | 0B40023A | CE 0.22μ 50V |
| C563,564 | 0B41409A | CP 910P 50V J (SR-4A & SR-4 (Canada)) |
| | 0B41404A | CP 560P 50V J (SR-4 (Australia)) |
| C567,568 | 0B01412A | CE 10μ 16V |
| C569,570 | 0B41281A | CMM 3900P 50V J |
| C652 | 0B41304A | CMM 0.33μ 50V J |
| C653 | 0B01863A | CE 3.3μ 50V |
| C654 | 0B01400A | CE 100μ 16V |
| CN3 | 0B82943A | 3P Connector WHT |
| CN4 | 0B82944A | 3P Connector YEL |
| CN5 | 0B81223A | 2P-T Post WHT |
| CN6 | 0B82946A | 2P Connector YEL |
| CN7 | 0B81231A | 4P-T Post WHT |
| | **— Eq. Amp. —** | |
| IC101 | 0B11204A | IC NJM5532DD |
| IC102 | 0B11005A | IC NJM072DE |
| Q101,102 201,202 | 0B10195A | FET 2SK146 (BL,V) |
| Q103,104 203,204 | 0B06299A | TR 2SC2878 |
| Q113,213 | 0B01872A | TR 2SC945L (P,Q) |
| D101,102 103,201 202 | 0B06398A | SiD 1SS176 |
| ZD101,201 | 0B12451A | ZD 10V UTZJ10B |
| ZD102 | 0B12469A | ZD 18V UTZJ18B |
| RY103,203 | 0B90243A | Relay G5A237P |
| R101,201 | 0B09453A | RM 51.1K 1/4W F |
| R102,202 | 0B22567A | RM 100 1/4W F |
| R103,203 | 0B22684A | RM 5.62 1/4W F |
| R104,204 | 0B09695A | RK 5.6K 1/6W J |
| R105,106 205,206 | 0B25260A | RM 4.75K 1/6W F |
| R107,207 | 0B09611A | RK 1.8 1/6W J |
| R108,208 | 0B25217A | RM 1.69K 1/6W F |
| R109,209 | 0B22635A | RM 1.21K 1/4W F |
| R110,210 | 0B09891A | RM 80.6 1/4W F |
| R111,211 | 0B22643A | RM 47.5 1/4W F |
| R112,212 | 0B22576A | RM 475 1/4W F |
| R113,213 | 0B09561A | RM 909K 1/4W F |
| R114,214 | 0B09562A | RM 75K 1/4W F |
| R115,215 | 0B25420A | RM 221K 1/6W F |
| R116,117 216,217 | 0B25387A | RM 100K 1/6W F |
| R118,218 | 0B09677A | RK 1K 1/6W J |
| R119,219 | 0B25258A | RM 4.53K 1/6W F |
| R120,125 220,225 | 0B09749A | RK 1M 1/6W J |
| R121,128 221,228 | 0B09741A | RK 470K 1/6W J |
| R122,222 | 0B25212A | RM 1.50K 1/6W F |
| R123,223 | 0B09305A | RM 100K 1/4W F |
| R124,224 | 0B09491A | RM 1K 1/4W F |
| R126 | 0B09725A | RK 100K 1/6W J |
| R129 | 0B09727A | RK 120K 1/6W J |
| C101,201 | 0B41703A | CSP 100P 50V J |
| C102,202 | 0B41304A | CMM 0.33μ 50V J |
| C103,109 203,209 | 0B41238A | CP 3600P 100V J |
| C104,204 | 0B09868A | CMM 0.1μ 50V J |
| C105,106 114,205 206,214 | 0B09816A | CE 10μ 16V (LN) |
| C107,207 | 0B40422A | CE 220μ 10V (LN) |
| C108,208 | 0B41225A | CP 1000P 100V J |
| C110,210 | 0B41117A | CP 470P 100V G |
| C111,211 | 0B41119A | CP 560P 100V G |
| C112,212 | 0B09933A | CE 2.2μ 50V (LN) |
| C113,213 | 0B05582A | CM 0.022μ 50V J |
| C115 | 0B40117A | CE 22μ 50V |
| C134,135 234,235 | 0B41791A | CSP 1000P 50V J |
| C136,236 | 0B41789A | CSP 510P 50V J |
| SW105 | 0B70078A | Slide Switch SSSP12 |
| | **— Input Selector —** | |
| Q301,302 303 | 0B06142A | TR 2SC2240 (BL) |
| Q304 | 0B06372A | TR 2SA953 (K,L) |
| Q305 | 0B06322A | TR 2SC2002 (K,L) |
| Q306 | 0B06013A | TR 2SA733 (P,Q) |
| D301-306 | 0B06398A | SiD 1SS176 (6) |
| RY101,102 | 0B90243A | Relay 24V G5A237P |
| R137,139 237,239 312 | 0B09733A | RK 220K 1/6W J |
| R301,303 305 | 0B09707A | RK 18K 1/6W J |
| R302,304 310,313 | 0B09725A | RK 100K 1/6W J |
| R306 | 0B09717A | RK 47K 1/6W J |
| R307 | 0B09709A | RK 22K 1/6W J |
| R308 | 0B09697A | RK 6.8K 1/6W J |
| R309 | 0B09689A | RK 3.3K 1/6W J |
| R311 | 0B09719A | RK 56K 1/6W J |
| C137,138 | 0B41217A | CP 470P 100V J |
| C301,302 303 | 0B41298A | CMM 0.1μ 50V J |
| C304 | 0B40265A | CE 0.1μ 50V |
| C305 | 0B40027A | CE 2.2μ 50V |
| SW101 | 0B70100A | Slide Switch ESA26132 |
| SW201 | 0B70103A | Slide Switch ESA26572 |
| CN17 | 0B82957A | 2P Connetor WHT |
| CN24 | 0B81229A | 3P-T Post RED |
| CN25 | 0B81231A | 4P-T Post WHT |
| CN30 | 0B82968A | 5P Connector WHT |
| CN39 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82750A | PD Connector V80 (1) |
| | 0B82751A | PD Connector V80 (3) |
| | 0B82752A | PD Connector V80 (1) |
| | 0B82992A | PD Connector V150 WHT (2) |
| | 0B83007A | PD Connector V130 (1) |
| | 0B83008A | PD Connector V150 (1) |
| | 0B83009A | PD Connector V170 (1) |
| | 0B83010A | PD Connector V90 (2) |
| | 0B83002A | Ribbon Cable 6P 190mm (1) |
| | 0B81020A | 2P Pin Jack (1) |
| | 0B81593A | 4P Pin Jack (2) |
| | 0B81594A | 6P Pin Jack (1) |
| | **— Flat Amp. —** | |
| IC103 | 0B11070A | IC NJM072S |
| Q105,106 205,206 | 0B10193A | FET 2SK184 (GR) |
| Q107,110 207,210 | 0B10050A | TR 2SA970 (BL) |
| Q108,109 208,209 | 0B06142A | TR 2SC2240 (BL) |
| Q111,112 211,212 | 0B06299A | TR 2SC2878 |
| ZD103,203 | 0B12433A | ZD 5.6V UTZJ5.6B |
| ZD104,204 | 0B12457A | ZD 12V UTZJ12B |
| D104 | 0B06398A | SiD 1SS176 |
| R131-135 231-235 | 0B25387A | RM 100K 1/6W F (10) |
| R136,236 | 0B25195A | RM 1.00K 1/6W F |
| R144,148 244,248 | 0B25099A | RM 100 1/6W F |
| R145,245 | 0B25437A | RM 332K 1/6W F |
| R146,246 | 0B25238A | RM 2.80K 1/6W F |
| R147,247 | 0B25316A | RM 18.2K 1/6W F |
| R149,249 | 0B25295A | RM 11.0K 1/6W F |
| R150,250 | 0B25236A | RM 2.67K 1/6W F |
| R151,251 | 0B25176A | RM 634 1/6W F |
| R152,252 | 0B09695A | RK 5.6K 1/6W J |
| R153,253 | 0B09685A | RK 2.2K 1/6W J |
| R154,254 | 0B09677A | RK 1K 1/6W J |
| R164,264 | 0B09653A | RK 100 1/6W J |
| R165,166 265,266 | 0B09717A | RK 47K 1/6W J |
| C118,218 | 0B09816A | CE 10μ 16V (LN) |
| C122,222 | 0B41703A | CSP 100P 50V J |
| C131,231 | 0B41609A | CMM 5P 50V Z |
| CN42,43 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82971A | Ribbon Cable 6P 230mm (1) |
| | **— Power Amp. —** | |
| Q701,801 | 0B10125A | TR 2SC2259 |
| Q702,703 802,803 | 0B06142A | TR 2SC2240 (BL) |
| Q704,707 804,807 | 0B10204A | TR 2SA1145 (O,Y) |
| Q705,706 805,806 | 0B10205A | TR 2SC2705 (O,T) |
| ZD701,801 | 0B12445A | ZD 8.2V UTZJ8.2B |
| VR701,801 | 0B32078A | Semi VR 4.7K (B) |
| R701,801 | 0B09472A | RM 220K 1/4W F |
| R702,802 | 0B22567A | RM 100 1/4W F |
| R703,710 803,810 | 0B22747A | RM 42.2K 1/4W F |
| R704,804 | 0B22550A | RM 1.02K 1/4W F |
| R705,805 | 0B01679A | RK 100 1/4W J |
| R706,806 | 0B25486A | RM 374 1/4W F |
| R707,807 | 0B24111A | RF 22K 1/2W J |
| R708,808 | 0B01846A | RK 4.7K 1/4W J |
| R709,809 | 0B22748A | RM 2.05K 1/4W F |
| R712,715 718,812 815,818 | 0B22632A | RM 75 1/4W F |
| R713,813 | 0B05623A | RK 1.2K 1/4W J |
| R714,814 | 0B25487A | RM 220 1/2W F |
| R716,717 816,817 | 0B09420A | RM 2.2K 1/4W F |
| R719,720 819,820 | 0B05675A | RK 3.9K 1/4W J |
| R721,734 821,834 | 0B24110A | RF 10 1/2W J |
| R722,733 822,833 | 0B22700A | RM 3.32 1/4W F |
| R735-738 835-838 | 0B24094A | RC 1 5W K (8) |
| R739,839 | 0B24137A | RF 5.6 2W |
| R749,849 | 0B24138A | RF 330 2W |
| R752,852 | 0B01683A | RK 15K 1/4W J |
| C701,801 | 0B09933A | CE 2.2μ 50V (LN) |
| C702,802 | 0B41223A | CP 820P 100V J |
| C703,803 | 0B41282A | CMM 4700P 50V J |
| C704,804 | 0B40421A | CE 220μ 25V (LN) |
| C705,805 | 0B41225A | CP 1000P 100V J |
| C706,707 806,807 | 0B41702A | CSP 22P 50V J |
| C708,808 | 0B41594A | CM 0.1μ 100V J |
| C711,811 | 0B41791A | CSP 1000P 50V J |
| TP1,2 | 0B81634A | 2P-T Post |
| CN44 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82980A | PD Connector V440 RED (1) |
| | 0B82981A | PD Connector V440 WHT (2) |
| | 0B82982A | PD Connector V440 YEL (1) |
| | 0B83007A | PD Connector V130 (2) |
| | **— Protector —** | |
| IC901 | 0B11246A | IC μPC1237H |
| Q715,717 815,817 | 0B10204A | TR 2SA1145 (O,Y) Pair |
| Q716,816 | 0B10205A | TR 2SC2705 (O,T) Pair |
| Q718 | 0B06322A | TR 2SC2002 (K,L) |
| Q901 | 0B10050A | TR 2SA970 (BL) |
| D307,901 902,903 | 0B06398A | SiD 1SS176 |
| ZD702,802 | 0B12439A | ZD 6.8V UTZJ6.8B |
| ZD703,803 | 0B12442A | ZD 7.5V UTZJ7.5B |
| ZD901 | 0B12463A | ZD 15V UTZJ15B |
| RY901,902 | 0B90199A | Relay 24V AJR32327 |
| RY903 | 0B90243A | Relay 24V G5A237P |
| R740,840 | 0B01681A | RK 3.3K 1/4W J |
| R742,842 | 0B05668A | RK 82K 1/4W J |
| R743,843 | 0B09509A | RK 20K 1/4W J |
| R744,747 844,847 907 | 0B05627A | RK 330K 1/4W J |
| R746,846 901 | 0B05641A | RK 47K 1/4W J |
| R748 | 0B01888A | RK 10K 1/4W J |
| R902,906 | 0B01889A | RK 100K 1/4W J |
| R903 | 0B01683A | RK 15K 1/4W J |
| R904 | 0B05508A | RK 56K 1/4W J |
| R905 | 0B01933A | RK 220 1/4W J |
| R908,909 | 0B24136A | RF 1K 3W |
| R910 | 0B24139A | RF 2.2K 1W |
| R913 | 0B09725A | RK 100K 1/6W J |
| C901 | 0B40408A | CE 330μ 10V (BP) |
| C902 | 0B40116A | CE 10μ 50V |
| C903 | 0B09372A | CE 2.2μ 50V |
| C904 | 0B01400A | CE 100μ 16V |
| CN26 | 0B81239A | 6P-T Post WHT |
| CN27 | 0B81229A | 3P-T Post RED |
| | **— Regulator —** | |
| Q401,403 408,412 | 0B06013A | TR 2SA733 (P,Q) |
| Q402,404 407 | 0B01872A | TR 2SC945L (P,Q) |
| Q405 | 0B10210A | TR 2SC1826 (O,Y) |
| Q406 | 0B10209A | TR 2SA768 (O,Y) |
| Q409 | 0B06322A | TR 2SC2002 (K,L) |
| Q410,411 | 0B06372A | TR 2SA953 (K,L) |
| ZD401 | 0B12445A | ZD 8.2V UTZJ8.2B |
| ZD402,403 | 0B12457A | ZD 12V UTZJ12B |
| D416 | 0B12418A | SiD UB-151 |
| R401,402 | 0B09719A | RK 56K 1/6W J |
| R403,404 | 0B09662A | RK 240 1/6W J |
| R405 | 0B09695A | RK 5.6K 1/6W J |
| R406,407 408,409 | 0B25291A | RM 10.0K 1/6W F |
| R410 | 0B09681A | RK 1.5K 1/6W J |
| R411,412 413 | 0B09685A | RK 2.2K 1/6W J |
| R414 | 0B09687A | RK 2.7K 1/6W J |
| C401,402 | 0B40428A | CE 2200μ 35V (LN) |
| C406,407 | 0B41791A | CSP 1000P 50V J |
| CN29 | 0B81225A | 2P-T Post RED |
| F401,402 | 0B08374A | Fuse 1A (SR-4A & SR-4 (Canada)) |
| | 0B08457A | Fuse T500mA 250V (SR-4 (Australia)) |
| | 0B08349B | Fuse Clip (SR-4 (Australia)) |
| | 0M04957A | Fuse Label T500mAx2 (SR-4 (Australia)) |
| | **— Miscellaneous —** | |
| | 0B60431B | Main P.C.B. |
| Q708,808 | 0B06303A | TR 2SB772 (P,Q) |
| Q709,809 | 0B10206A | TR 2SC2167 Pair |
| Q710,810 | 0B10207A | TR 2SA957 Pair |
| Q711,713 811,813 | 0B10177A | TR 2SA1491 (P,Y,G) |
| Q712,714 812,814 | 0B10179A | TR 2SC3855 (P,Y,G) |
| TS901 | 0B90247A | Thermistor UP62 |
| | 0E00868A | BT3x8 ⊕Binding (5) |
| | 0E03138A | M3x10 ⊕Binding (14) |
| | 0J05328A | Insulator Sheet (2) |
| | 0J05329A | Main P.C.B. Holder L (1) |
| | 0J05330A | Main P.C.B. Holder R (1) |
| | 0J05349A | Thermistor Holder (1) |
| | 0J05352A | Main Heat Sink (1) |

## (2) For SR-4 (Other)

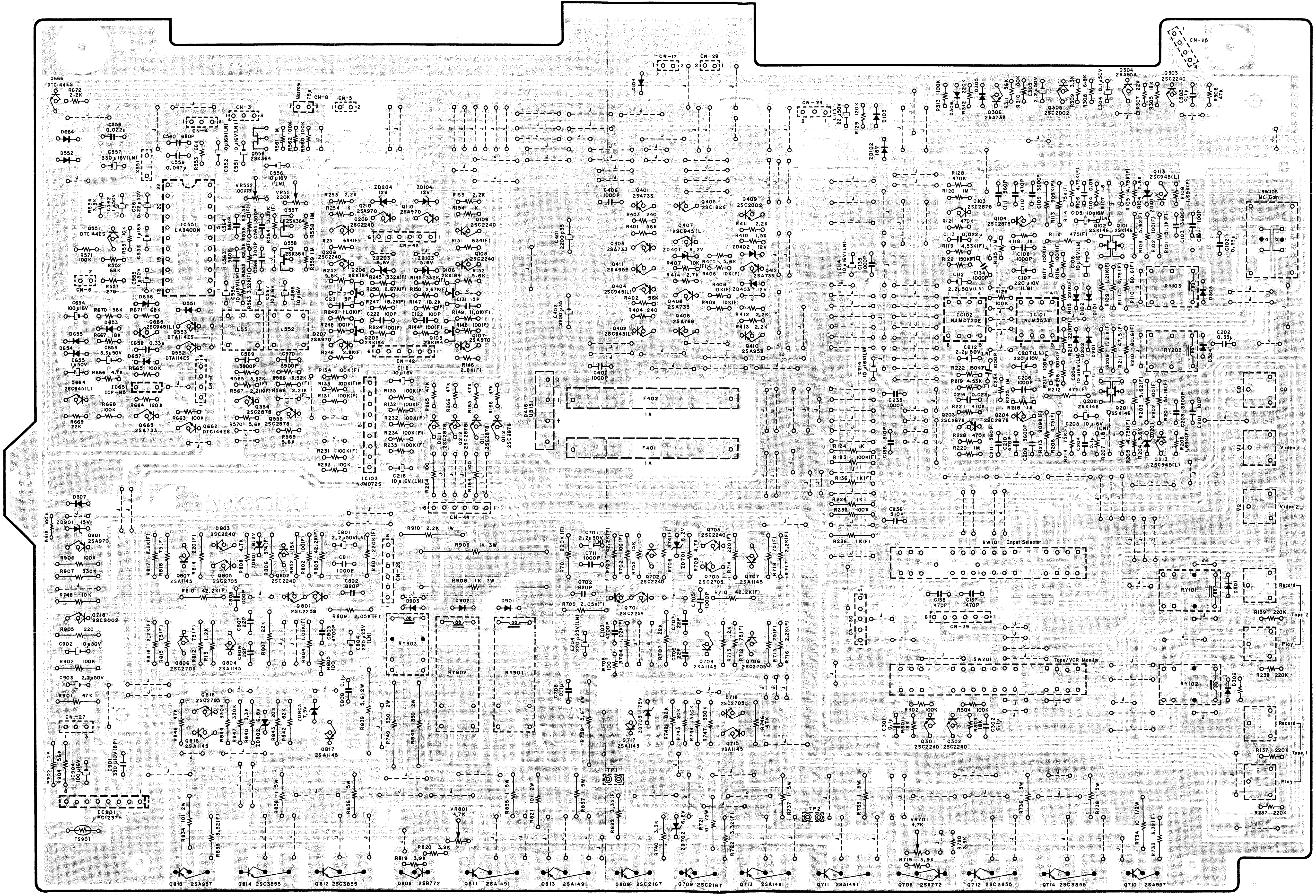

SW105 MC Gain
SW101 Input Selector
SW201 Tape/VCR Monitor
CD
Video 1
Video 2
Record
Play
Tape 2
Tape 1
RY101
RY102
RY103
RY203
RY901
RY902
RY903
F401 1A
F402 1A
IC101 NJM5532
IC102 NJM072DE
IC103 NJM072S
IC551 LA3400N
IC901 μPC1237H
TS901
TP1
TP2
VR801 4.7K
VR701 4.7K
CN-3
CN-4
CN-5
CN-6
CN-7
CN-8
CN-17
CN-24
CN-25
CN-26
CN-27
CN-29
CN-30
CN-39
CN-42
CN-43
CN-44
L551
L552
Nakamichi
Q810 2SA957
Q814 2SC3855
Q812 2SC3855
Q808 2SB772
Q811 2SA1491
Q813 2SA1491
Q809 2SC2167
Q709 2SC2167
Q713 2SA1491
Q711 2SA1491
Q708 2SB772
Q712 2SC3855
Q714 2SC3855
Q710 2SA957

Fig. 5.19.2

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06596A | **Main P.C.B. Ass'y (SR-4 (Other))** |
| | **— MPX —** | |
| IC551 | 0B11245A | IC LA3400N |
| IC651 | 0B11248A | IC ICP-N5-T104 |
| Q551,662 666 | 0B10062A | TR DTC144ES |
| Q552,553 | 0B10058A | TR DTA114ES |
| Q554,555 | 0B06299A | TR 2SC2878 |
| Q556,557 558 | 0B10151A | FET 2SK364 |
| Q663 | 0B06013A | TR 2SA733 (P,Q) |
| Q664,665 | 0B01872A | TR 2SC945L (P,Q) |
| D551,552 650,653 654,655 656,657 664 | 0B06398A | SiD 1SS176 |
| L551,552 | 0B51237A | MPX Filter TF-1042B-1013-00 |
| VR551 | 0B32066A | Semi VR 220K (B) |
| VR552 | 0B32086A | Semi VR 100K (B) |
| X551 | 0B90172A | Ceramic Filter CSB456F11 |
| R551 | 0B09701A | RK 10K 1/6W J |
| R552,553 671 | 0B09721A | RK 68K 1/6W J |
| R554 | 0B09689A | RK 3.3K 1/6W J |
| R555,556 | 0B25379A | RM 82.5K 1/6W F |
| R557 | 0B09663A | RK 270 1/6W J |
| R558,559 561 | 0B09749A | RK 1M 1/6W J |
| R560,562 571,663 665,668 | 0B09725A | RK 100K 1/6W J |
| R563,564 565,566 | 0B25245A | RM 3.32K 1/6W F |
| R567,568 | 0B25228A | RM 2.21K 1/6W F |
| R569,570 | 0B09695A | RK 5.6K 1/6W J |
| R664 | 0B09727A | RK 120K 1/6W J |
| R666 | 0B09693A | RK 4.7K 1/6W J |
| R667 | 0B09707A | RK 18K 1/6W J |
| R669 | 0B09709A | RK 22K 1/6W J |
| R670 | 0B09719A | RK 56K 1/6W J |
| R672 | 0B09685A | RK 2.2K 1/6W J |
| C551,552 554,556 | 0B09816A | CE 10μ 16V (LN) |
| C553,555 562,655 | 0B01405A | CE 1μ 50V |
| C557 | 0B40418A | CE 330μ16V (LN) |
| C558 | 0B41290A | CMM 0.022μ 50V J |
| C559 | 0B41555A | CC 0.047μ 25V Z |
| C560 | 0B09287A | CC 680P 50V K |
| C561 | 0B40023A | CE 0.22μ 50V |
| C563,564 | 0B41404A | CP 560P 50V J |
| C565,566 | 0B41397A | CP 300P 50V J |
| C567,568 | 0B01412A | CE 10μ 16V |
| C569,570 | 0B41281A | CMM 3900P 50V J |
| C652 | 0B41304A | CMM 0.33μ 50V J |
| C653 | 0B01863A | CE 3.3μ 50V |
| C654 | 0B01400A | CE 100μ 16V |
| CN3 | 0B82943A | 3P Connector WHT |
| CN4 | 0B82944A | 3P Connector YEL |
| CN5 | 0B81223A | 2P-T Post WHT |
| CN6 | 0B82946A | 2P Connector YEL |
| CN7 | 0B81231A | 4P-T Post WHT |
| CN8 | 0B81226A | 2P-T Post YEL |
| | **— Eq. Amp. —** | |
| IC101 | 0B11204A | IC NJM5532DD |
| IC102 | 0B11005A | IC NJM072DE |
| Q101,102 201,202 | 0B10195A | FET 2SK146 (BL,V) |
| Q103,104 203,204 | 0B06299A | TR 2SC2878 |
| Q113,213 | 0B01872A | TR 2SC945L (P,Q) |
| D101,102 103,201 202 | 0B06398A | SiD 1SS176 |
| ZD101,201 | 0B12451A | ZD 10V UTZJ10B |
| ZD102 | 0B12469A | ZD 18V UTZJ18B |
| RY103,203 | 0B90243A | Relay G5A237P |
| R101,201 | 0B09453A | RM 51.1K 1/4W F |
| R102,202 | 0B22567A | RM 100 1/4W F |
| R103,203 | 0B22684A | RM 5.62 1/4W F |
| R104,204 | 0B09695A | RK 5.6K 1/6W J |
| R105,106 205,206 | 0B25260A | RM 4.75K 1/6W F |
| R107,207 | 0B09611A | RK 1.8 1/6W J |
| R108,208 | 0B25217A | RM 1.69K 1/6W F |
| R109,209 | 0B22635A | RM 1.21K 1/4W F |
| R110,210 | 0B09891A | RM 80.6 1/4W F |
| R111,211 | 0B22643A | RM 47.5 1/4W F |
| R112,212 | 0B22576A | RM 475 1/4W F |
| R113,213 | 0B09561A | RM 909K 1/4W F |
| R114,214 | 0B09562A | RM 75K 1/4W F |
| R115,215 | 0B25420A | RM 221K 1/6W F |
| R116,117 216,217 | 0B25387A | RM 100K 1/6W F |
| R118,218 | 0B09677A | RK 1K 1/6W J |
| R119,219 | 0B25258A | RM 4.53K 1/6W F |
| R120,125 220,225 | 0B09749A | RK 1M 1/6W J |
| R121,128 221,228 | 0B09741A | RK 470K 1/6W J |
| R122,222 | 0B25212A | RM 1.50K 1/6W F |
| R123,223 | 0B09305A | RM 100K 1/4W F |
| R124,224 | 0B09491A | RM 1K 1/4W F |
| R126 | 0B09725A | RK 100K 1/6W J |
| R129 | 0B09727A | RK 120K 1/6W J |
| C101,201 | 0B41703A | CSP 100P 50V J |
| C102,202 | 0B41304A | CMM 0.33μ 50V J |
| C103,109 203,209 | 0B41238A | CP 3600P 100V J |
| C104,204 | 0B09868A | CMM 0.1μ 50V J |
| C105,106 114,205 206,214 | 0B09816A | CE 10μ 16V (LN) |
| C107,207 | 0B40422A | CE 220μ 10V (LN) |
| C108,208 | 0B41225A | CP 1000P 100V J |
| C110,210 | 0B41117A | CP 470P 100V G |
| C111,211 | 0B41119A | CP 560P 100V G |
| C112,212 | 0B09933A | CE 2.2μ 50V (LN) |
| C113,213 | 0B05582A | CM 0.022μ 50V J |
| C115 | 0B40117A | CE 22μ 50V |
| C134,135 234,235 | 0B41791A | CSP 1000P 50V J |
| C136,236 | 0B41789A | CSP 510P 50V J |
| SW105 | 0B70078A | Slide Switch SSSP12 |
| | **— Input Selector —** | |
| Q301,302 303 | 0B06142A | TR 2SC2240 (BL) |
| Q304 | 0B06372A | TR 2SA953 (K,L) |
| Q305 | 0B06322A | TR 2SC2002 (K,L) |
| Q306 | 0B06013A | TR 2SA733 (P,Q) |
| D301-306 | 0B06398A | SiD 1SS176 (6) |
| RY101,102 | 0B90243A | Relay 24V G5A237P |
| R137,139 237,239 312 | 0B09733A | RK 220K 1/6W J |
| R301,303 305 | 0B09707A | RK 18K 1/6W J |
| R302,304 310,313 | 0B09725A | RK 100K 1/6W J |
| R306 | 0B09717A | RK 47K 1/6W J |
| R307 | 0B09709A | RK 22K 1/6W J |
| R308 | 0B09697A | RK 6.8K 1/6W J |
| R309 | 0B09689A | RK 3.3K 1/6W J |
| R311 | 0B09719A | RK 56K 1/6W J |
| C137,138 | 0B41217A | CP 470P 100V J |
| C301,302 303 | 0B41298A | CMM 0.1μ 50V J |
| C304 | 0B40265A | CE 0.1μ 50V |
| C305 | 0B40027A | CE 2.2μ 50V |
| SW101 | 0B70100A | Slide Switch ESA26132 |
| SW201 | 0B70103A | Slide Switch ESA26572 |
| CN17 | 0B82957A | 2P Connetor WHT |
| CN24 | 0B81229A | 3P-T Post RED |
| CN25 | 0B81231A | 4P-T Post WHT |
| CN30 | 0B82968A | 5P Connector WHT |
| CN39 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82750A | PD Connector V80 (1) |
| | 0B82751A | PD Connector V80 (3) |
| | 0B82752A | PD Connector V80 (1) |
| | 0B82992A | PD Connector V150 WHT (2) |
| | 0B83007A | PD Connector V130 (1) |
| | 0B83008A | PD Connector V150 (1) |
| | 0B83009A | PD Connector V170 (1) |
| | 0B83010A | PD Connector V90 (2) |
| | 0B83002A | Ribbon Cable 6P 190mm (1) |
| | 0B81020A | 2P Pin Jack (1) |
| | 0B81593A | 4P Pin Jack (2) |
| | 0B81594A | 6P Pin Jack (1) |
| | **— Flat Amp. —** | |
| IC103 | 0B11070A | IC NJM072S |
| Q105,106 205,206 | 0B10193A | FET 2SK184 (GR) |
| Q107,110 207,210 | 0B10050A | TR 2SA970 (BL) |
| Q108,109 208,209 | 0B06142A | TR 2SC2240 (BL) |
| Q111,112 211,212 | 0B06299A | TR 2SC2878 |
| ZD103,203 | 0B12433A | ZD 5.6V UTZJ5.6B |
| ZD104,204 | 0B12457A | ZD 12V UTZJ12B |
| D104 | 0B06398A | SiD 1SS176 |
| R131-135 231-235 | 0B25387A | RM 100K 1/6W F (10) |
| R136,236 | 0B25195A | RM 1.00K 1/6W F |
| R144,148 244,248 | 0B25099A | RM 100 1/6W F |
| R145,245 | 0B25437A | RM 332K 1/6W F |
| R146,246 | 0B25238A | RM 2.80K 1/6W F |
| R147,247 | 0B25316A | RM 18.2K 1/6W F |
| R149,249 | 0B25295A | RM 11.0K 1/6W F |
| R150,250 | 0B25236A | RM 2.67K 1/6W F |
| R151,251 | 0B25176A | RM 634 1/6W F |
| R152,252 | 0B09695A | RK 5.6K 1/6W J |
| R153,253 | 0B09685A | RK 2.2K 1/6W J |
| R154,254 | 0B09677A | RK 1K 1/6W J |
| R164,264 | 0B09653A | RK 100 1/6W J |
| R165,166 265,266 | 0B09717A | RK 47K 1/6W J |
| C118,218 | 0B09816A | CE 10μ 16V (LN) |
| C122,222 | 0B41703A | CSP 100P 50V J |
| C131,231 | 0B41609A | CMM 5P 50V Z |
| CN42,43 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82971A | Ribbon Cable 6P 230mm (1) |
| | **— Power Amp. —** | |
| Q701,801 | 0B10125A | TR 2SC2259 |
| Q702,703 802,803 | 0B06142A | TR 2SC2240 (BL) |
| Q704,707 804,807 | 0B10204A | TR 2SA1145 (O,Y) |
| Q705,706 805,806 | 0B10205A | TR 2SC2705 (O,T) |
| ZD701,801 | 0B12445A | ZD 8.2V UTZJ8.2B |
| VR701,801 | 0B32078A | Semi VR 4.7K (B) |
| R701,801 | 0B09472A | RM 220K 1/4W F |
| R702,802 | 0B22567A | RM 100 1/4W F |
| R703,710 803,810 | 0B22747A | RM 42.2K 1/4W F |
| R704,804 | 0B22550A | RM 1.02K 1/4W F |
| R705,805 | 0B01679A | RK 100 1/4W J |
| R706,806 | 0B25486A | RM 374 1/4W F |
| R707,807 | 0B24111A | RF 22K 1/2W J |
| R708,808 | 0B01846A | RK 4.7K 1/4W J |
| R709,809 | 0B22748A | RM 2.05K 1/4W F |
| R712,715 718,812 815,818 | 0B22632A | RM 75 1/4W F |
| R713,813 | 0B05623A | RK 1.2K 1/4W J |
| R714,814 | 0B25487A | RM 220 1/2W F |
| R716,717 816,817 | 0B09420A | RM 2.2K 1/4W F |
| R719,720 819,820 | 0B05675A | RK 3.9K 1/4W J |
| R721,734 821,834 | 0B24110A | RF 10 1/2W J |
| R722,733 822,833 | 0B22700A | RM 3.32 1/4W F |
| R735-738 835-838 | 0B24094A | RC 1 5W K (8) |
| R739,839 | 0B24137A | RF 5.6 2W |
| R749,849 | 0B24138A | RF 330 2W |
| R752,852 | 0B01683A | RK 15K 1/4W J |
| C701,801 | 0B09933A | CE 2.2μ 50V (LN) |
| C702,802 | 0B41223A | CP 820P 100V J |
| C703,803 | 0B41282A | CMM 4700P 50V J |
| C704,804 | 0B40421A | CE 220μ 25V (LN) |
| C705,805 | 0B41225A | CP 1000P 100V J |
| C706,707 806,807 | 0B41702A | CSP 22P 50V J |
| C708,808 | 0B41594A | CM 0.1μ 100V J |
| C711,811 | 0B41791A | CSP 1000P 50V J |
| TP1,2 | 0B81634A | 2P-T Post |
| CN44 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82980A | PD Connector V440 RED (1) |
| | 0B82981A | PD Connector V440 WHT (2) |
| | 0B82982A | PD Connector V440 YEL (1) |
| | 0B83007A | PD Connector V130 (2) |
| | **— Protector —** | |
| IC901 | 0B11246A | IC μPC1237H |
| Q715,717 815,817 | 0B10204A | TR 2SA1145 (O,Y) Pair |
| Q716,816 | 0B10205A | TR 2SC2705 (O,T) Pair |
| Q718 | 0B06322A | TR 2SC2002 (K,L) |
| Q901 | 0B10050A | TR 2SA970 (BL) |
| D307,901 902,903 | 0B06398A | SiD 1SS176 |
| ZD702,802 | 0B12439A | ZD 6.8V UTZJ6.8B |
| ZD703,803 | 0B12442A | ZD 7.5V UTZJ7.5B |
| ZD901 | 0B12463A | ZD 15V UTZJ15B |
| RY901,902 | 0B90199A | Relay 24V AJR32327 |
| RY903 | 0B90243A | Relay 24V G5A237P |
| R740,840 | 0B01681A | RK 3.3K 1/4W J |
| R742,842 | 0B05668A | RK 82K 1/4W J |
| R743,843 | 0B09509A | RK 20K 1/4W J |
| R744,747 844,847 907 | 0B05627A | RK 330K 1/4W J |
| R746,846 901 | 0B05641A | RK 47K 1/4W J |
| R748 | 0B01888A | RK 10K 1/4W J |
| R902,906 | 0B01889A | RK 100K 1/4W J |
| R903 | 0B01683A | RK 15K 1/4W J |
| R904 | 0B05508A | RK 56K 1/4W J |
| R905 | 0B01933A | RK 220 1/4W J |
| R908,909 | 0B24136A | RF 1K 3W |
| R910 | 0B24139A | RF 2.2K 1W |
| R913 | 0B09725A | RK 100K 1/6W J |
| C901 | 0B40408A | CE 330μ 10V (BP) |
| C902 | 0B40116A | CE 10μ 50V |
| C903 | 0B09372A | CE 2.2μ 50V |
| C904 | 0B01400A | CE 100μ 16V |
| CN26 | 0B81239A | 6P-T Post WHT |
| CN27 | 0B81229A | 3P-T Post RED |
| | **— Regulator —** | |
| Q401,403 408,412 | 0B06013A | TR 2SA733 (P,Q) |
| Q402,404 407 | 0B01872A | TR 2SC945L (P,Q) |
| Q405 | 0B10210A | TR 2SC1826 (O,Y) |
| Q406 | 0B10209A | TR 2SA768 (O,Y) |
| Q409 | 0B06322A | TR 2SC2002 (K,L) |
| Q410,411 | 0B06372A | TR 2SA953 (K,L) |
| ZD401 | 0B12445A | ZD 8.2V UTZJ8.2B |
| ZD402,403 | 0B12457A | ZD 12V UTZJ12B |
| D416 | 0B12418A | SiD UB-151 |
| R401,402 | 0B09719A | RK 56K 1/6W J |
| R403,404 | 0B09662A | RK 240 1/6W J |
| R405 | 0B09695A | RK 5.6K 1/6W J |
| R406,407 408,409 | 0B25291A | RM 10.0K 1/6W F |
| R410 | 0B09681A | RK 1.5K 1/6W J |
| R411,412 413 | 0B09685A | RK 2.2K 1/6W J |
| R414 | 0B09687A | RK 2.7K 1/6W J |
| C401,402 | 0B40428A | CE 2200μ 35V (LN) |
| C406,407 | 0B41791A | CSP 1000P 50V J |
| CN29 | 0B81225A | 2P-T Post RED |
| F401,402 | 0B08374A | Fuse 1A |
| | **— Miscellaneous —** | |
| | 0B60431B | Main P.C.B. |
| Q708,808 | 0B06303A | TR 2SB772 (P,Q) |
| Q709,809 | 0B10206A | TR 2SC2167 Pair |
| Q710,810 | 0B10207A | TR 2SA957 Pair |
| Q711,713 811,813 | 0B10177A | TR 2SA1491 (P,Y,G) |
| Q712,714 812,814 | 0B10179A | TR 2SC3855 (P,Y,G) |
| TS901 | 0B90247A | Thermistor UP62 |
| | 0E00868A | BT3x8 ⊕Binding (5) |
| | 0E03138A | M3x10 ⊕Binding (14) |
| | 0J05328A | Insulator Sheet (2) |
| | 0J05329A | Main P.C.B. Holder L (1) |
| | 0J05330A | Main P.C.B. Holder R (1) |
| | 0J05349A | Thermistor Holder (1) |
| | 0J05352A | Main Heat Sink (1) |

## 6. SCHEMATIC DIAGRAMS

### 6.1. IC Block Diagrams

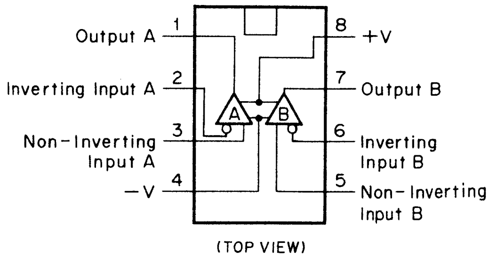

Output A
Inverting Input A
Non-Inverting Input A
−V
+V
Output B
Inverting Input B
Non-Inverting Input B
1
2
3
4
5
6
7
8
A
B
(TOP VIEW)

Fig. 6.1.1 Operational Amp. IC NJM072DE, NJM5532DD

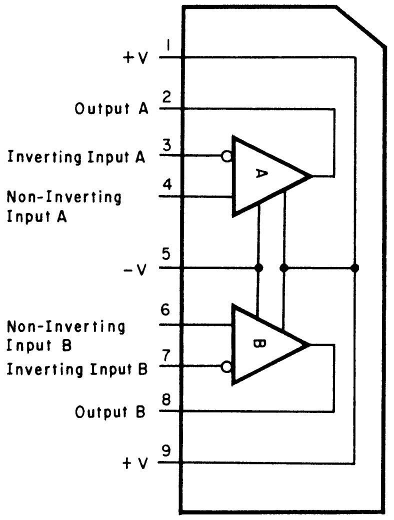

+V
Output A
Inverting Input A
Non-Inverting Input A
−V
Non-Inverting Input B
Inverting Input B
Output B
+V
1
2
3
4
5
6
7
8
9
A
B

Fig. 6.1.2 Operational Amp. IC NJM072S

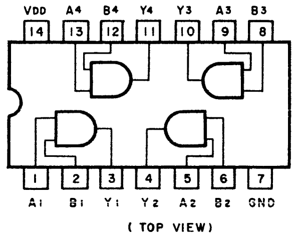

VDD
A4
B4
Y4
Y3
A3
B3
14
13
12
11
10
9
8
1
2
3
4
5
6
7
A1
B1
Y1
Y2
A2
B2
GND
(TOP VIEW)

Fig. 6.1.3 AND Gate C-MOS IC μPD4081BC

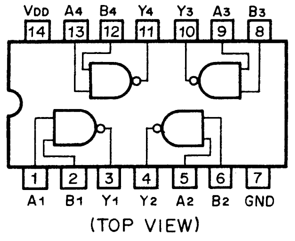

VDD
A4
B4
Y4
Y3
A3
B3
14
13
12
11
10
9
8
1
2
3
4
5
6
7
A1
B1
Y1
Y2
A2
B2
GND
(TOP VIEW)

Fig. 6.1.4 NAND Gate C-MOS IC μPD4011BC

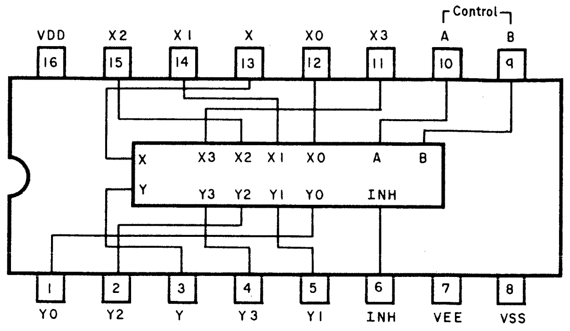

Control
VDD
X2
X1
X
X0
X3
A
B
16
15
14
13
12
11
10
9
X
X3 X2 X1 X0
A
B
Y
Y3 Y2 Y1 Y0
INH
1
2
3
4
5
6
7
8
Y0
Y2
Y
Y3
Y1
INH
VEE
VSS

Fig. 6.1.5 Analog Multiplexers/Demultiplexers IC μPD4052BC

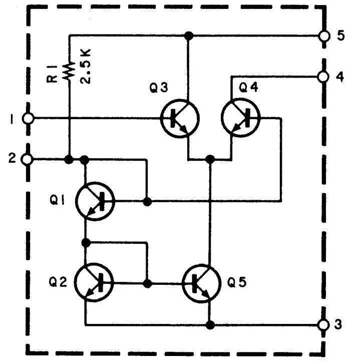

R1 2.5K
Q3
Q4
Q1
Q2
Q5
1
2
3
4
5

Fig. 6.1.6 FM IF Amp. IC TA7060AP

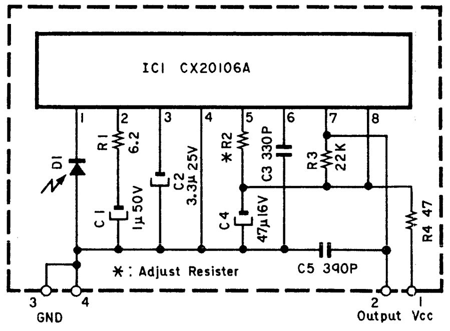

IC1 CX20106A
1
2
3
4
5
6
7
8
D1
R1 6.2
C1 1μ50V
C2 3.3μ 25V
*R2
C3 330P
C4 47μ16V
R3 22K
R4 47
C5 390P
*: Adjust Resister
3 GND
4
2 Output
1 Vcc

Fig. 6.1.7 Remote Control Receiver IC BX-1419

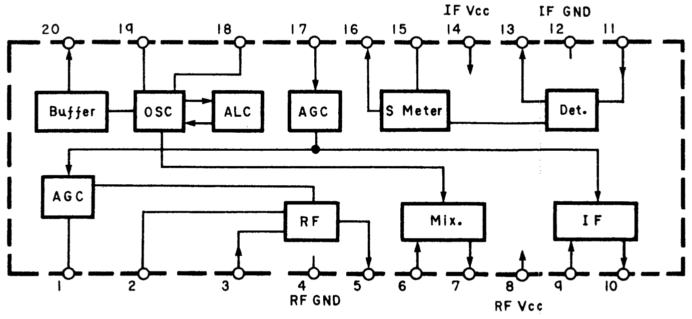

IF Vcc
IF GND
20
19
18
17
16
15
14
13
12
11
Buffer
OSC
ALC
AGC
S Meter
Det.
AGC
RF
Mix.
IF
1
2
3
4
RF GND
5
6
7
8
RF Vcc
9
10

Fig. 6.1.8 AM Tuner IC LA1247

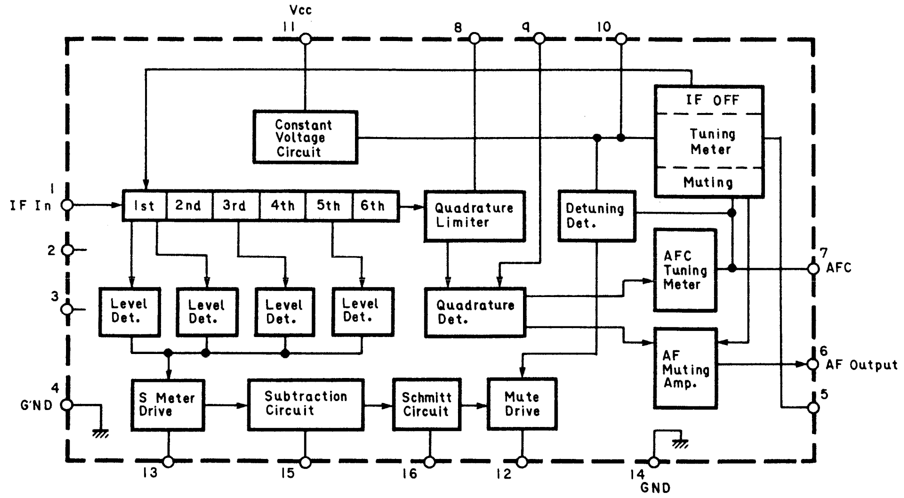

Vcc
11
8
9
10
Constant Voltage Circuit
IF OFF
Tuning Meter
Muting
IF In 1
2
3
4 GND
1st
2nd
3rd
4th
5th
6th
Quadrature Limiter
Detuning Det.
AFC Tuning Meter
7 AFC
Level Det.
Level Det.
Level Det.
Level Det.
Quadrature Det.
AF Muting Amp.
6 AF Output
5
S Meter Drive
Subtraction Circuit
Schmitt Circuit
Mute Drive
13
15
16
12
14 GND

Fig. 6.1.9 FM IF System IC LA1235

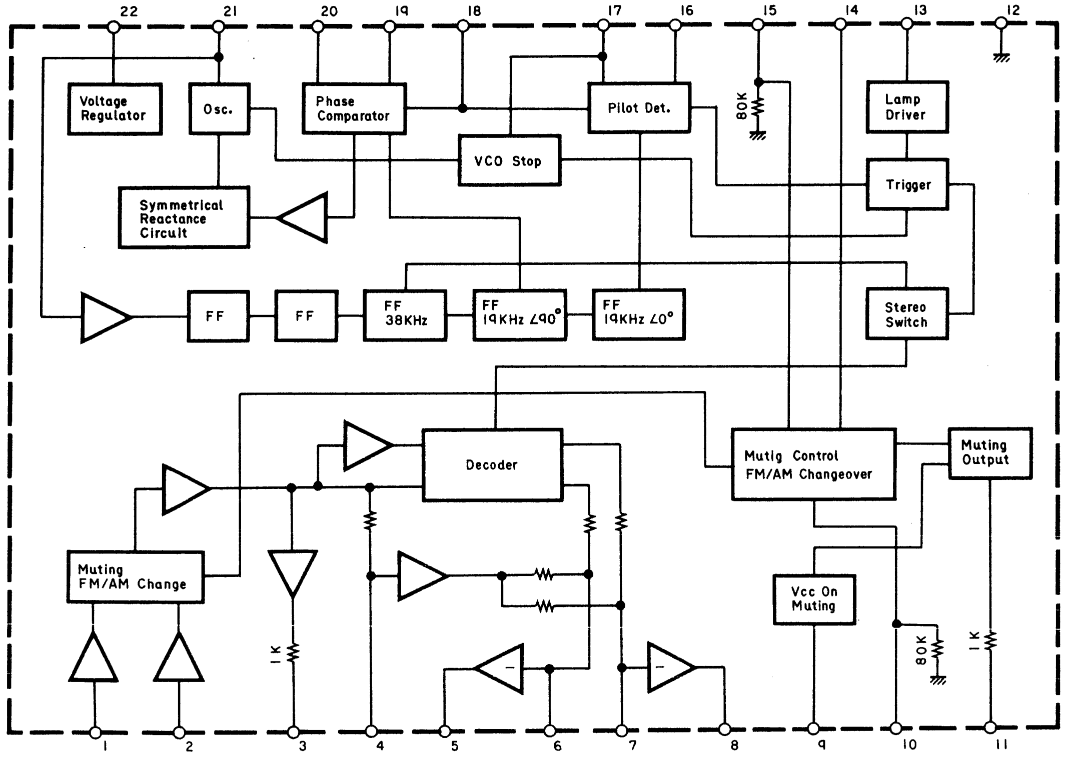

22
21
20
19
18
17
16
15
14
13
12
Voltage Regulator
Osc.
Phase Comparator
Pilot Det.
80K
Lamp Driver
VCO Stop
Trigger
Symmetrical Reactance Circuit
FF
FF
FF 38KHz
FF 19KHz ∠90°
FF 19KHz ∠0°
Stereo Switch
Decoder
Mutig Control FM/AM Changeover
Muting Output
Muting FM/AM Change
Vcc On Muting
1K
80K
1K
1
2
3
4
5
6
7
8
9
10
11

Fig. 6.1.10 FM Stereo Demodulator IC LA3400N

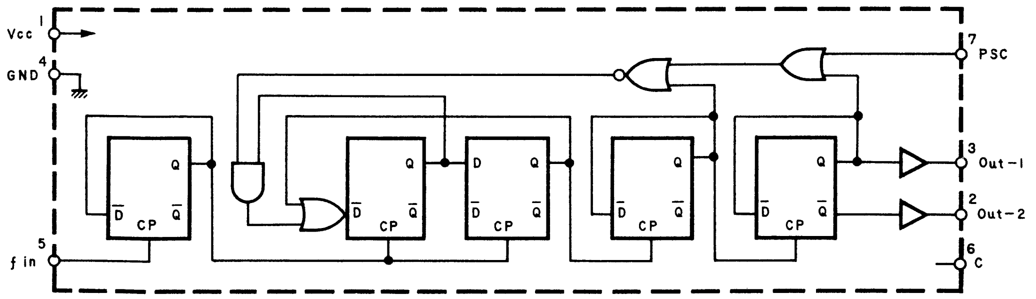

Vcc 1
GND 4
7 PSC
Q
D CP Q
3 Out-1
2 Out-2
f in 5
6 C

Fig. 6.1.11 ECL Prescaler (FM) IC TD6104

### 3.16. Tuner P.C.B. Ass'y

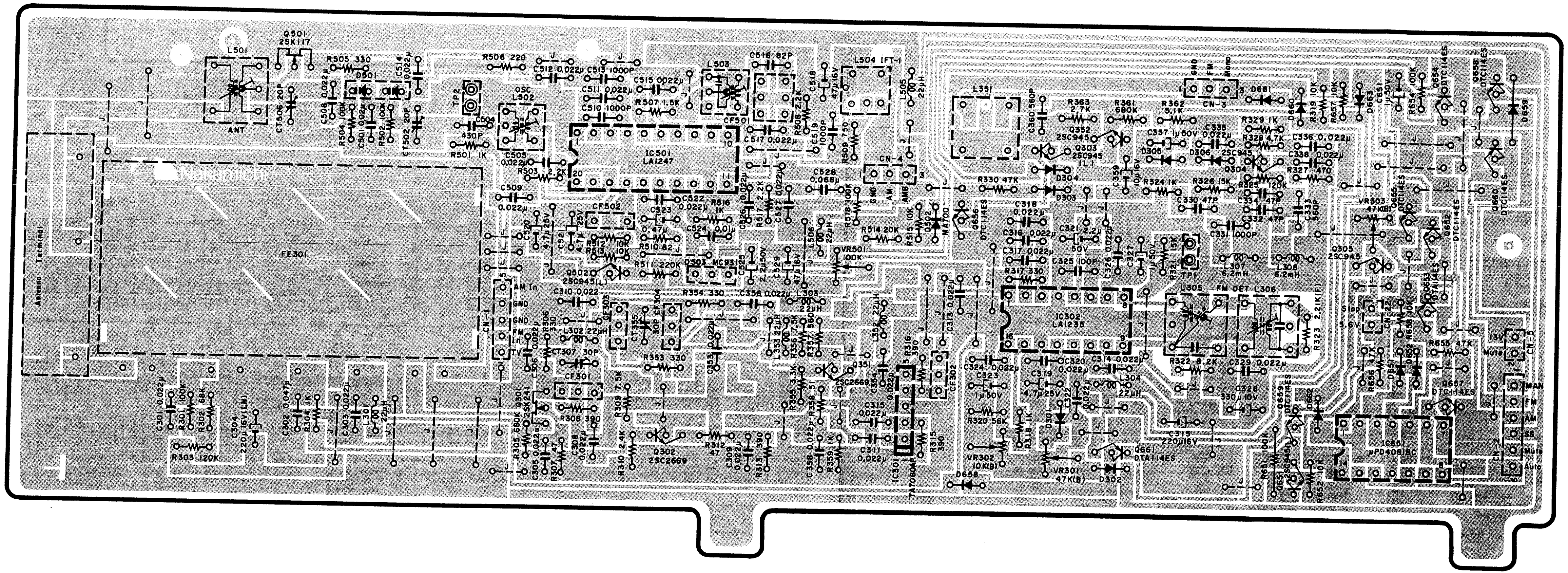

L501
ANT
Q501
2SK117
R505 330
C514 0.022μ
R506 220
C512 0.022μ
C513 1000P
C515 0.022μ
C510 1000P
R507 1.5K
L503
C516 82P
L504 IFT-1
C518 47μ16V
L505 22μH
OSC L502
TP2
430P
R501 1K
C505 0.022μ
R503 2.2K
C509 0.022μ
IC501 LA1247
CF501
CF502
Q502 2SC945L(L)
D503 MC931
D502 MA700
R511 220K
R514 20K
VR501 100K
CN-4
AM
GND
AMB
Nakamichi
FE301
Antenna Terminal
AM In
GND
FM
CN-1
CF301
CF303
CF304
CT307 30P
L302 22μH
R353 330
R354 330
Q302 2SC2669
R303 120K
C304 220μ16V(LN)
L351
R363 2.7K
R361 680K
Q352 2SC945
Q303 2SC945
Q304
D303
D304
D305
D306 2SC945
CN-3
GND
FM
Mono
D661
R330 47K
R324 1K
R326 15K
R328 4.7K
R329 1K
R327 470
C336 0.022μ
C338 0.022μ
C333 560P
C331 1000P
TP1
L307 6.2mH
L308 6.2mH
Q305 2SC945
IC302 LA1235
L305
FM DET
L306
R323 2.21K(F)
R322 8.2K
C329 0.022μ
C314 0.022μ
C328 330μ10V
C315 220μ16V
VR302 10K(B)
VR301 47K(B)
VR303 47K(B)
D302
D658
Q661 DTA114ES
IC301 TA7060AP
IC651 μPD4081BC
CN-2
MAN
FM
AM
SS
Mute
Auto
CN-5
Mute
13V
Stop
5.6V
Q657 DTC114ES
Q656 DTC114ES
Q658 DTC114ES
Q659 DTC114ES
Q660 DTC114ES
Q655 DTC114ES

Fig. 3.16

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06846A | Tuner P.C.B. Ass'y |
| | — FM — | |
| IC301 | 0B11156A | IC TA7060AP |
| IC302 | 0B11157A | IC LA1235 |
| Q301 | 0B10127A | FET 2SK241 (GR) |
| Q302,351 | 0B10174A | TR 2SC2669 (O,Y) |
| Q303,304 305,352 | 0B01872A | TR 2SC945L (P,Q) |
| D301,302 303,304 305,306 | 0B06398A | SiD 1SS176 |
| VR301,303 | 0B32084A | Semi VR 47K (B) |
| VR302 | 0B32080A | Semi VR 10K (B) |
| L301,302 303,304 352,353 | 0B51239A | Micro Coil 22μH |
| L305 | 0B51240A | FM Det. Coil A |
| L306 | 0B51241A | FM Det. Coil B |
| L307,308 | 0B51243A | Choke Coil |
| L351 | 0B51238A | Anti-birdy Filter |
| FE301 | 0B91017A | Front-end FE407-G25 |
| R301 | 0B09725A | RK 100K 1/6W J |
| R302 | 0B09721A | RK 68K 1/6W J |
| R303,325 | 0B09727A | RK 120K 1/6W J |
| R304,318 324,329 359 | 0B09677A | RK 1K 1/6W J |
| R305,361 | 0B09745A | RK 680K 1/6W J |
| R306,317 353,354 | 0B09665A | RK 330 1/6W J |
| R307,312 | 0B09645A | RK 47 1/6W J |
| R308,313 315,316 | 0B09667A | RK 390 1/6W J |
| R309,356 | 0B09698A | RK 7.5K 1/6W J |
| R310 | 0B09686A | RK 2.4K 1/6W J |
| R319 | 0B09701A | RK 10K 1/6W J |
| R320 | 0B09719A | RK 56K 1/6W J |
| R321,326 | 0B09705A | RK 15K 1/6W J |
| R322 | 0B09699A | RK 8.2K 1/6W J |
| R323 | 0B25228A | RM 2.21K 1/6W F |
| R327 | 0B09669A | RK 470 1/6W J |
| R328 | 0B09693A | RK 4.7K 1/6W J |
| R330 | 0B09717A | RK 47K 1/6W J |
| R355 | 0B09689A | RK 3.3K 1/6W J |
| R357 | 0B09671A | RK 560 1/6W J |
| R358 | 0B09646A | RK 51 1/6W J |
| R362 | 0B09694A | RK 5.1K 1/6W J |
| R363 | 0B09687A | RK 2.7K 1/6W J |
| CF301,302 | 0B41818A | Ceramic Filter SFE10.7MX2K-A |
| CF303,304 | 0B41746A | Ceramic Filter SFE10.7MS3GH15A |
| CT307,355 | 0B41614A | C Trimmer 30P |
| C301,303 305,306 308,309 310,311 312,316 317,318 324,326 329,335 336,338 353,354 356,358 620,622 | 0B41787A | CC 0.022μ 25V Z |
| C302 | 0B41294A | CMM 0.047μ 50V J |
| C304 | 0B40420A | CE 220μ 16V (LN) |
| C313,314 | 0B41290A | CM 0.022μ 50V J |
| C315 | 0B40079A | CE 220μ 16V |
| C319 | 0B01402A | CE 4.7μ 25V |
| C321 | 0B09372A | CE 2.2μ 50V |
| C323,327 337 | 0B01405A | CE 1μ 50V |
| C325 | 0B41071A | CC 100P 50V J |
| C328 | 0B40066A | CE 330μ 10V |
| C330,332 334 | 0B09280A | CC 47P 50V J |
| C331 | 0B41007A | CC 1000P 25V M |
| C333 | 0B09379A | CC 560P 50V K |
| C359 | 0B09816A | CE 10μ 16V (LN) |
| C360 | 0B41404A | CP 560P 50V J |
| | 0B90078A | Antenna Terminal (1) |
| | — AM — | |
| IC501 | 0B11243A | IC LA1247 |
| Q501 | 0B06129A | FET 2SK117 (Y) |
| Q502 | 0B01872A | TR 2SC945L (P,Q) |
| D501 | 0B12386A | Vari-Cap. KV1226Y |
| D502 | 0B12363A | SiD MA700 |
| D503 | 0B12420A | SiD MC931 |
| L501 | 0B51236A | Antenna Coil |
| L502 | 0B51235A | Osc. Coil |
| L503 | 0B51234A | AM IFT2 |
| L504 | 0B51233A | AM IFT1 |
| L505,506 | 0B51239A | Micro Coil LAL02TA220K |
| VR501 | 0B32086A | Semi VR 100K (B) |
| R501,516 | 0B09677A | RK 1K 1/6W J |
| R502,504 518 | 0B09725A | RK 100K 1/6W J |
| R503,508 517 | 0B09685A | RK 2.2K 1/6W J |
| R505 | 0B09665A | RK 330 1/6W J |
| R506 | 0B09661A | RK 220 1/6W J |
| R507 | 0B09681A | RK 1.5K 1/6W J |
| R509 | 0B09674A | RK 750 1/6W J |
| R510 | 0B09651A | RK 82 1/6W J |
| R511 | 0B09733A | RK 220K 1/6W J |
| R512,513 515 | 0B09701A | RK 10K 1/6W J |
| R514 | 0B09708A | RK 20K 1/6W J |
| CF501 | 0B41701A | Ceramic Filter SFZ450G3L |
| CF502 | 0B92003A | Resonator 450 kHz BFU450C4N |
| CT502,506 | 0B42005A | C Trimmer 20P |
| C501,505 508,509 511,512 514,515 517,522 526 | 0B41787A | CC 0.022μ 25V Z |
| C504 | 0B41401A | CP 430P 50V J |
| C510,513 519 | 0B41007A | CC 1000P 25V M |
| C516 | 0B41711A | CC 82P 50V K |
| C518,529 | 0B01403A | CE 47μ 16V |
| C520,521 | 0B01402A | CE 4.7μ 25V |
| C523 | 0B40111A | CE 0.47μ 50V |
| C524 | 0B41553A | CC 0.01μ 25V Z |
| C525 | 0B09372A | CE 2.2μ 50V |
| C527 | 0B09586A | CC 2200P 50V K |
| C528 | 0B41296A | CMM 0.068μ 50V J |
| | — Control — | |
| IC651 | 0B06219A | IC μPD4081BC |
| Q651 | 0B01872A | TR 2SC945L (P,Q) |
| Q652 | 0B10062A | TR DTC144ES |
| Q653,660 661 | 0B10058A | TR DTA114ES |
| Q654,655 656,657 658,659 | 0B10068A | TR DTC114ES |
| D651,652 658,660 661,662 663 | 0B06398A | SiD 1SS176 |
| D659 | 0B06181A | SiD 1SS53 |
| R651,654 | 0B01889A | RK 100K 1/4W J |
| R652,657 658 | 0B09701A | RK 10K 1/6W J |
| R653 | 0B09707A | RK 18K 1/6W J |
| R655,656 | 0B09717A | RK 47K 1/6W J |
| C651 | 0B01405A | CE 1μ 50V |
| | — Miscellaneous — | |
| | 0B60438A | Tuner P.C.B. |
| CN1 | 0B83078A | 5P Connector |
| CN2 | 0B82942A | 6P Connector YEL |
| CN3 | 0B81227A | 3P-T Post WHT |
| CN4 | 0B81230A | 3P-T Post YEL |
| CN5 | 0B82945A | 2P Connector WHT |
| CN22 | 0B82962A | 2P Connector BLK |
| TP1,2 | 0B81634A | 2P-T Post |
| | 0J05326B | Earth Plate (1) |

### 3.17. Main P.C.B. Ass'y

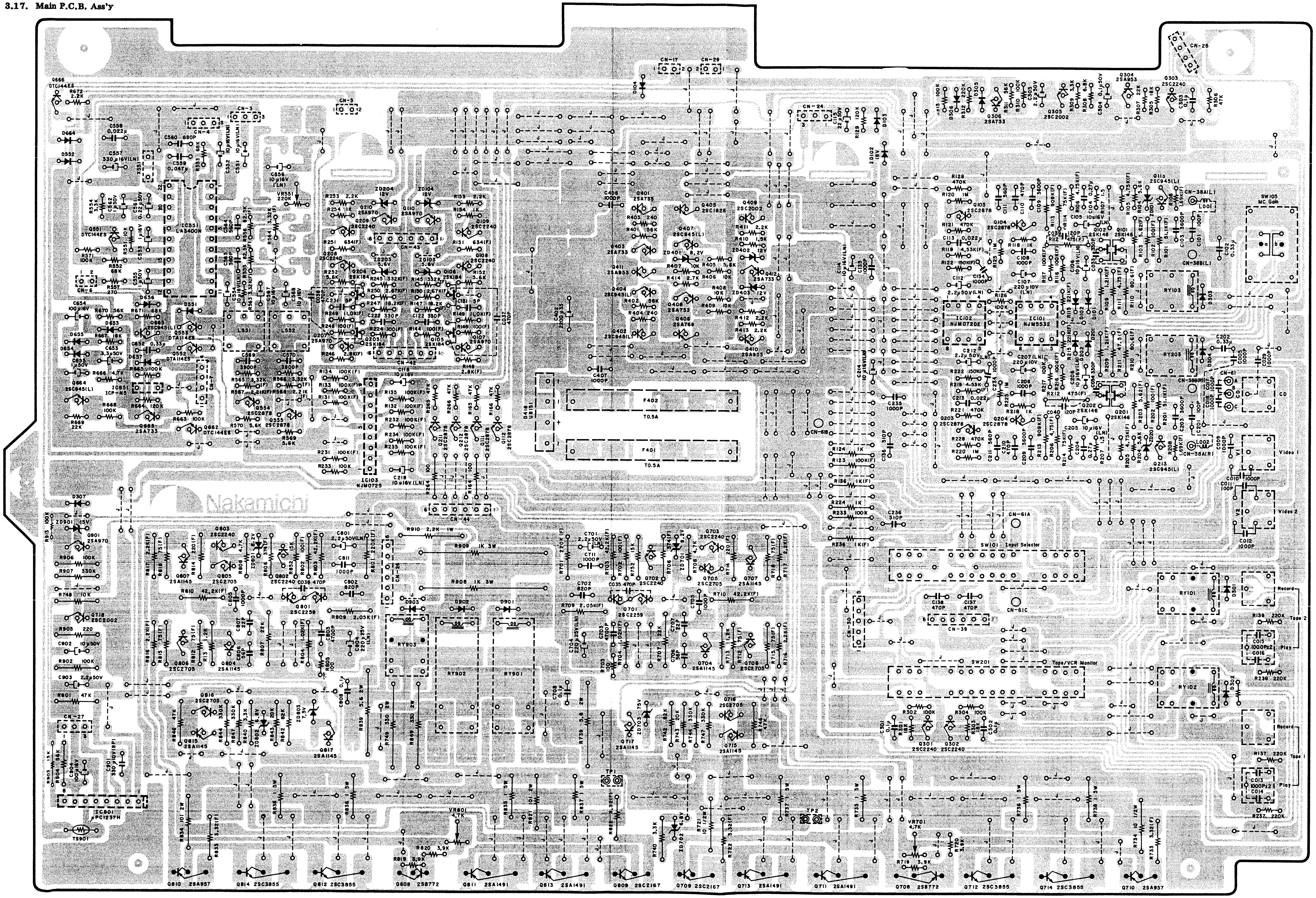

Nakamichi
CN-17
CN-29
CN-24
CN-25
CN-3
CN-4
CN-5
CN-6
CN-27
CN-39
CN-42
CN-44
CN-61
CN-61A
CN-61C
CN-38A(L)
CN-38B(L)
CN-38A(R)
CN-38B(R)
SW105 MC Gain
SW101 Input Selector
SW201 Tape/VCR Monitor
CD
Video 1
Video 2
Record
Tape 2
Play
Tape 1
F402 T0.5A
F401 T0.5A
IC551 LA3400N
IC101 NJM5532
IC102 NJM072DE
IC103 NJM072S
IC901 μPC1237H
RY101
RY102
RY103
RY203
RY901
RY902
RY903
TP1
TP2
TS901
VR801 4.7K
VR701 4.7K
Q810 2SA957
Q814 2SC3855
Q812 2SC3855
Q808 2SB772
Q811 2SA1491
Q813 2SA1491
Q809 2SC2167
Q709 2SC2167
Q713 2SA1491
Q711 2SA1491
Q708 2SB772
Q712 2SC3855
Q714 2SC3855
Q710 2SA957

Fig. 3.17

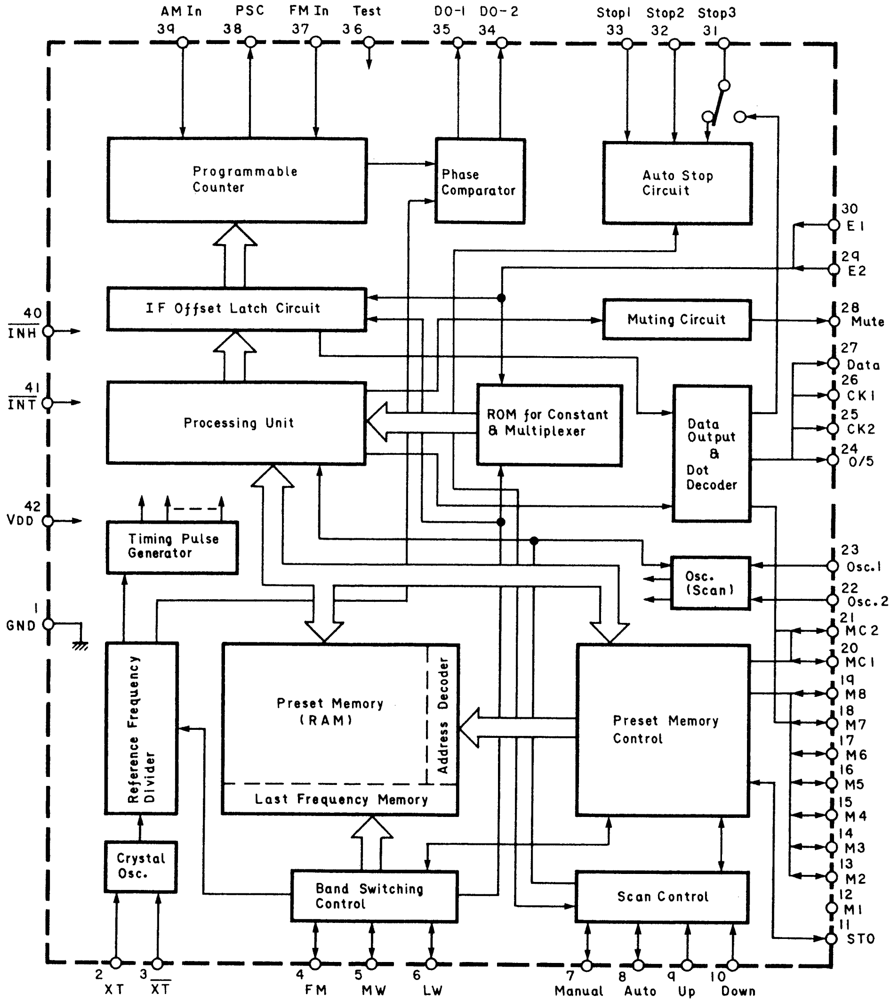

AM In 39
PSC 38
FM In 37
Test 36
DO-1 35
DO-2 34
Stop1 33
Stop2 32
Stop3 31
Programmable Counter
Phase Comparator
Auto Stop Circuit
IF Offset Latch Circuit
Muting Circuit
Processing Unit
ROM for Constant & Multiplexer
Data Output & Dot Decoder
Timing Pulse Generator
Osc. (Scan)
Reference Frequency Divider
Preset Memory (RAM)
Address Decoder
Last Frequency Memory
Preset Memory Control
Crystal Osc.
Band Switching Control
Scan Control
40 INH
41 INT
42 VDD
1 GND
30 E1
29 E2
28 Mute
27 Data
26 CK1
25 CK2
24 0/5
23 Osc.1
22 Osc.2
21 MC2
20 MC1
19 M8
18 M7
17 M6
16 M5
15 M4
14 M3
13 M2
12 M1
11 STO
2 XT
3 XT
4 FM
5 MW
6 LW
7 Manual
8 Auto
9 Up
10 Down

Fig. 6.1.12 FM/MW/LW 3-Band Digital Tuning (Static Method) IC TC9147BP

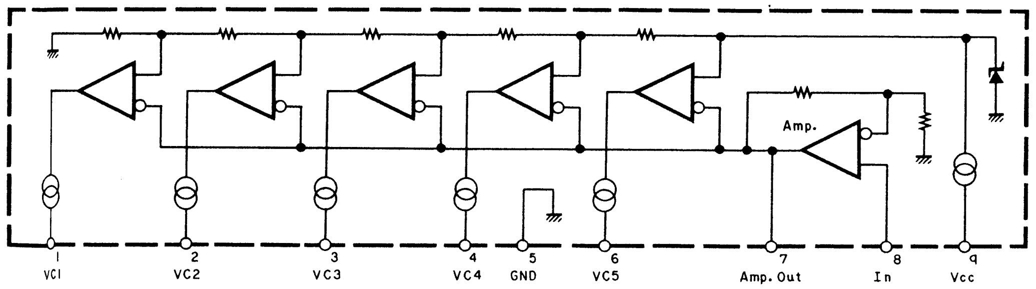

Amp.
1 VC1
2 VC2
3 VC3
4 VC4
5 GND
6 VC5
7 Amp. Out
8 In
9 Vcc

Fig. 6.1.13 Signal Meter Driver IC LB1413N

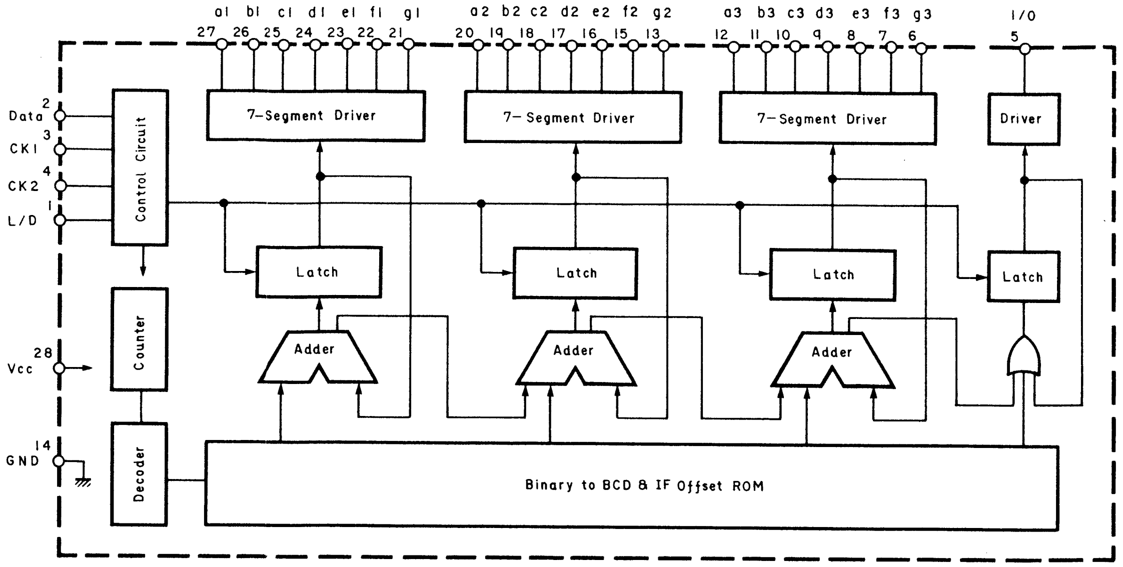

a1 b1 c1 d1 e1 f1 g1
27 26 25 24 23 22 21
a2 b2 c2 d2 e2 f2 g2
20 19 18 17 16 15 13
a3 b3 c3 d3 e3 f3 g3
12 11 10 9 8 7 6
I/O 5
2 Data
3 CK1
4 CK2
1 L/D
28 Vcc
14 GND
Control Circuit
Counter
Decoder
7-Segment Driver
Driver
Latch
Adder
Binary to BCD & IF Offset ROM

Fig. 6.1.14 Indicator Driver IC TD6301A

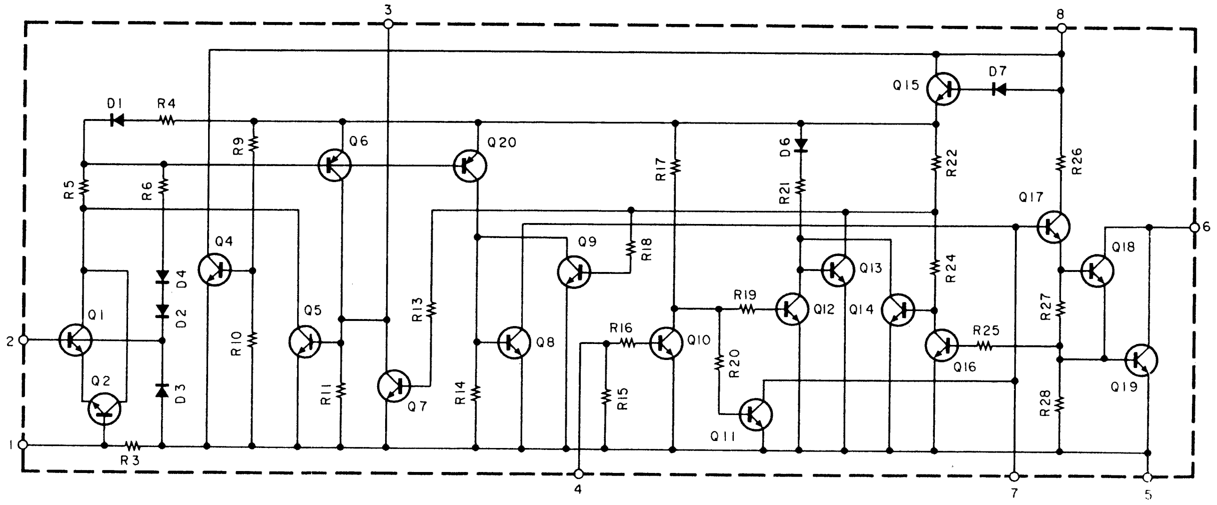
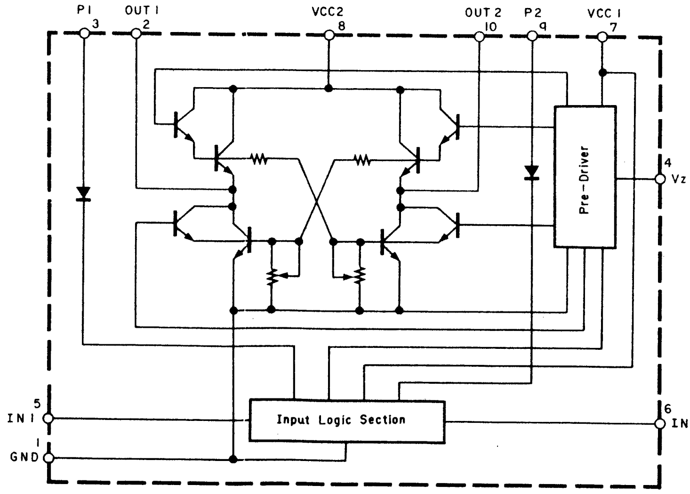

3
8
D1 R4
R5 R6 R9 R10 R11 R13 R14 R15 R16 R17 R18 R19 R20 R21 R22 R24 R25 R26 R27 R28
D2 D3 D4 D6 D7
Q1 Q2 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15 Q16 Q17 Q18 Q19 Q20
R3
2
1
4
6
7
5

Fig. 6.1.15 Motor Control IC LB1645N


P1 3
OUT1 2
VCC2 8
OUT2 10
P2 9
VCC1 7
Pre-Driver
4 Vz
Input Logic Section
5 IN1
1 GND
6 IN2

| INPUT |  | OUTPUT |  | OPERATION |
|---|---|---|---|---|
| IN1 | IN2 | OUT1 | OUT2 |  |
| 0 | 0 | 0 | 0 | Braking |
| 1 | 0 | 1 | 0 | Forward (Reverse) |
| 0 | 1 | 0 | 1 | Reverse (Forward) |
| 1 | 1 | 0 | 0 | Braking |

Fig. 6.1.16 Power Amp./Speaker Protector IC μPC1237H

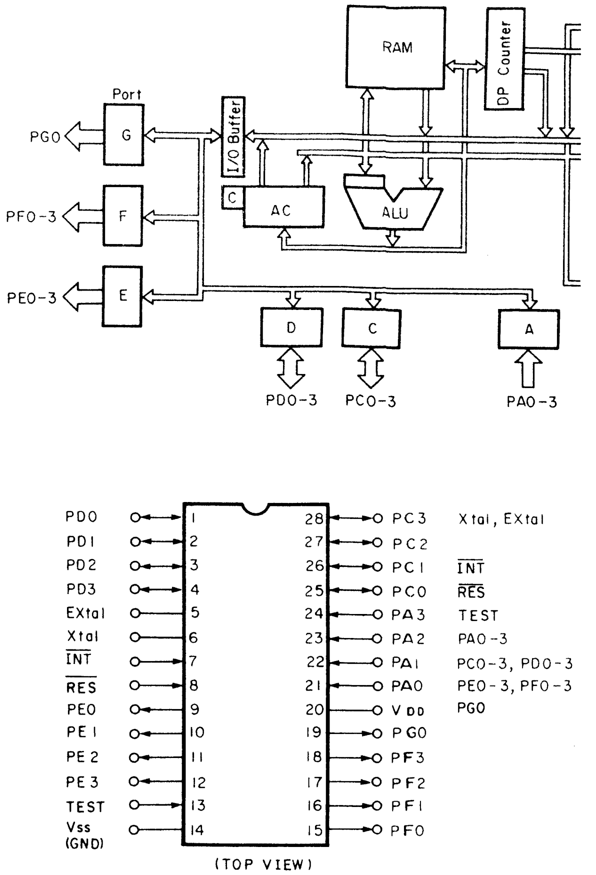
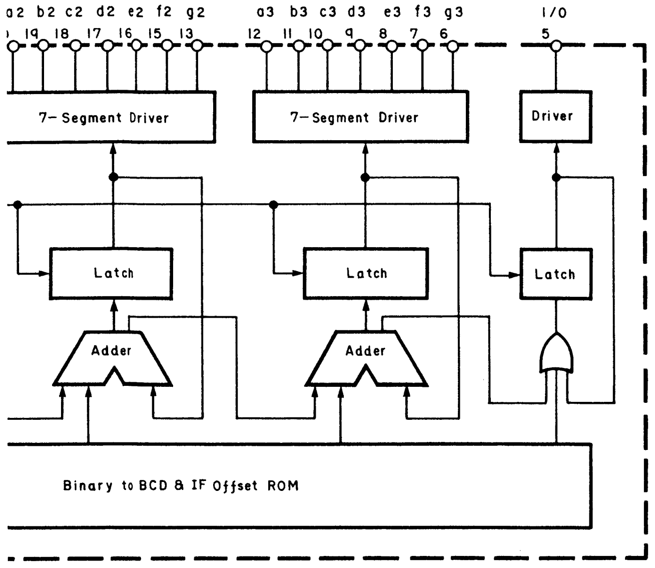

RAM
DP Counter
Port
PGO
G
I/O Buffer
C
AC
ALU
PFO-3
F
PEO-3
E
D
C
A
PDO-3
PCO-3
PAO-3
PD0 1
PD1 2
PD2 3
PD3 4
EXtal 5
Xtal 6
INT 7
RES 8
PE0 9
PE1 10
PE2 11
PE3 12
TEST 13
Vss (GND) 14
28 PC3
27 PC2
26 PC1
25 PC0
24 PA3
23 PA2
22 PA1
21 PA0
20 VDD
19 PG0
18 PF3
17 PF2
16 PF1
15 PF0
Xtal, EXtal
INT
RES
TEST
PAO-3
PCO-3, PDO-3
PEO-3, PFO-3
PGO
(TOP VIEW)

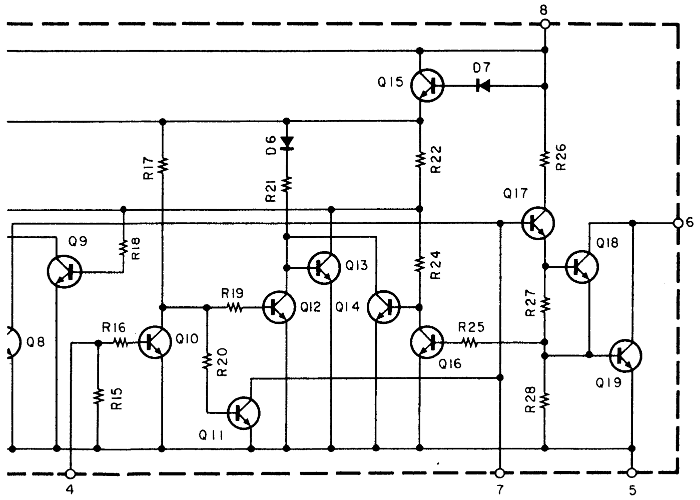
Fig. 6 1.17 Microprocessor LB6416E

**Function of Micro-processor LB6416E**

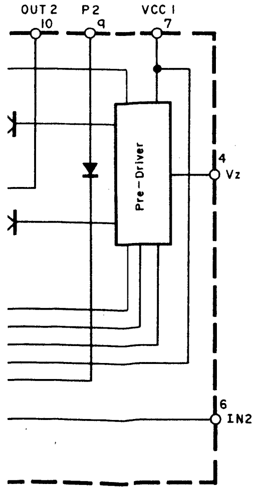
| Pin No. | Signal Name | In/ Out | Description |
|---|---|---|---|
| 1 | $\overline{\text{Power-ON}}$ | Out | $\overline{\text{Power-ON}}$ becomes<br>becomes "H" (reset<br>Power switch is tur<br>"L" signal causes rela<br>on the Power Supply<br>ON, as a result power<br>tive circuits.<br>Power ON/OFF cont<br>the Remote Control<br>Power ON/OFF but<br>Control Unit causes<br>to be changed, whic<br>and OFF of the p<br>(Active "L") |
| 2<br>3 | $\overline{\text{Seek-up}}$<br>$\overline{\text{Seek-down}}$ | Out | Becomes "L" upon<br>Down button on the<br>(Active "L") |
| 4 | $\overline{\text{M1}}$ | Out | Becomes "L" upon<br>Number button 1·6 o<br>Unit. Refer to $\overline{\text{Shif}}$<br>$\overline{\text{Non}}$-shift (pin No. 12) |
| 5<br>6 | EX<br>X | — | Resonator (800 kHz) |
| 7 | $\overline{\text{INT}}$ | In | Not used. Connected |


a2 b2 c2 d2 e2 f2 g2
19 18 17 16 15 13
a3 b3 c3 d3 e3 f3 g3
12 11 10 9 8 7 6
I/O
5
7- Segment Driver
7- Segment Driver
Driver
Latch
Latch
Latch
Adder
Adder
Binary to BCD & IF Offset ROM

:ator Driver IC TD6301A


8
Q15
D7
D6
R17
R21
R22
R26
Q17
6
Q9
R18
Q13
R24
Q18
R19
Q12
Q14
R27
R16
Q10
R25
Q8
R20
Q16
Q19
R15
R28
Q11
4
7
5

:or Control IC LB1645N


OUT2
10
P2
9
VCC1
7
Pre-Driver
4
Vz
6
IN2

| INPUT IN1 | INPUT IN2 | OUTPUT OUT1 | OUTPUT OUT2 | OPERATION |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | Braking |
| 1 | 0 | 1 | 0 | Forward (Reverse) |
| 0 | 1 | 0 | 1 | Reverse (Forward) |
| 1 | 1 | 0 | 0 | Braking |

p./Speaker Protector IC μPC1237H

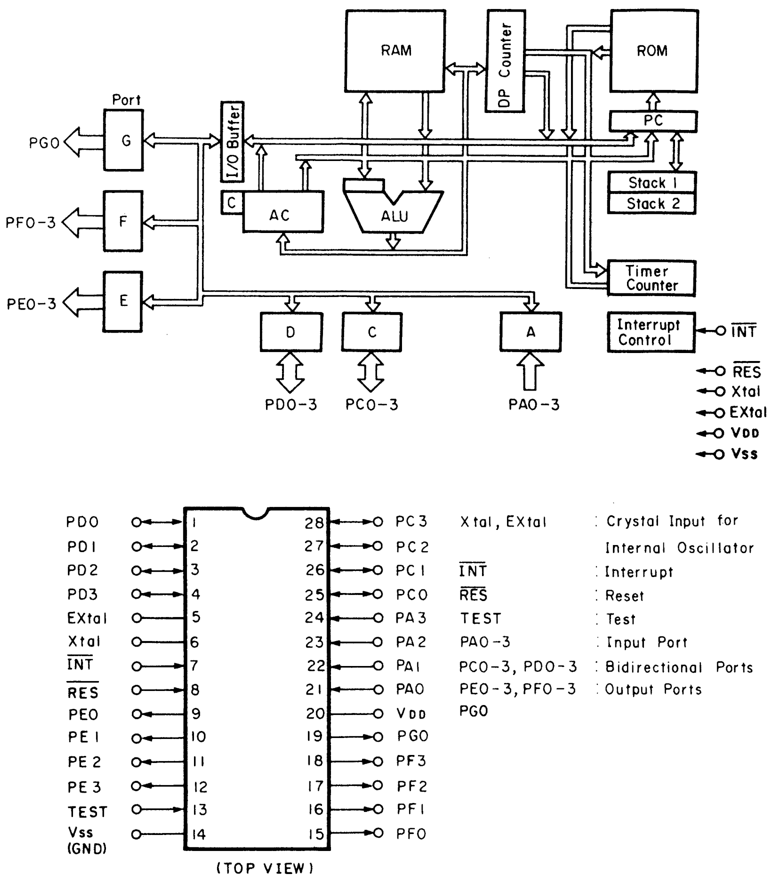
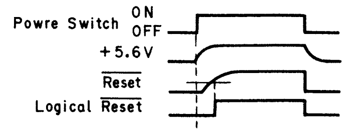
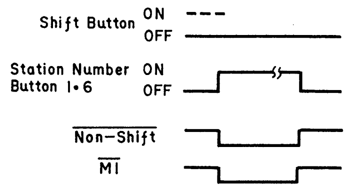
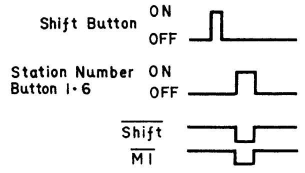
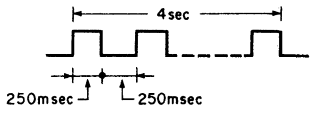

RAM
DP Counter
ROM
PC
Port
I/O Buffer
PGO
G
PFO-3
F
PEO-3
E
C
AC
ALU
Stack 1
Stack 2
Timer Counter
Interrupt Control
INT
D
C
A
PDO-3
PCO-3
PAO-3
RES
Xtal
EXtal
VDD
Vss
PDO 1
PD1 2
PD2 3
PD3 4
EXtal 5
Xtal 6
INT 7
RES 8
PEO 9
PE1 10
PE2 11
PE3 12
TEST 13
Vss (GND) 14
28 PC3
27 PC2
26 PC1
25 PCO
24 PA3
23 PA2
22 PA1
21 PAO
20 VDD
19 PGO
18 PF3
17 PF2
16 PF1
15 PFO
(TOP VIEW)
Xtal, EXtal : Crystal Input for Internal Oscillator
INT : Interrupt
RES : Reset
TEST : Test
PAO-3 : Input Port
PCO-3, PDO-3 : Bidirectional Ports
PEO-3, PFO-3 : Output Ports
PGO

Fig. 6 1.17 Microprocessor LB6416E

Function of Micro-processor LB6416E

| Pin No. | Signal Name | In/Out | Description |
|---|---|---|---|
| 1 | $\overline{\text{Power-ON}}$ | Out | $\overline{\text{Power-ON}}$ becomes "L" when $\overline{\text{Reset}}$ becomes "H" (reset is released), after the Power switch is turned ON. $\overline{\text{Power-ON}}$ = "L" signal causes relays RY401 and RY402 on the Power Supply P.C.B. Ass'y to turn ON, as a result power is supplied to respective circuits.<br>Power ON/OFF control is possible through the Remote Control Unit. Pressing of the Power ON/OFF button on the Remote Control Unit causes the state of $\overline{\text{Power-ON}}$ to be changed, which enables turning ON and OFF of the power to the circuits. (Active "L") |
| 2<br>3 | $\overline{\text{Seek-up}}$<br>$\overline{\text{Seek-down}}$ | Out | Becomes "L" upon push of the Seek Up/Down button on the Remote Control Unit. (Active "L") |
| 4 | $\overline{\text{M1}}$ | Out | Becomes "L" upon push of the Station Number button 1·6 on the Remote Control Unit. Refer to $\overline{\text{Shift}}$ (pin No. 11) and $\overline{\text{Non-shift}}$ (pin No. 12). (Active "L") |
| 5<br>6 | EX<br>X | — | Resonator (800 kHz) is connected. |
| 7 | $\overline{\text{INT}}$ | In | Not used. Connected to +5 V. |
| 8 | $\overline{\text{Reset}}$ | In | When the Power switch is turned ON or OFF, $\overline{\text{Reset}}$ becomes "L" and this IC is reset. (Active "L")<br> Powre Switch ON OFF<br>+5.6V<br>Reset<br>Logical Reset |
| 9<br>10 | $\overline{\text{AM}}$<br>$\overline{\text{FM}}$ | Out | Becomes "L" upon push of the AM/FM button on the Remote Control Unit. (Active "L") |
| 11<br>12 | $\overline{\text{Shift}}$<br>$\overline{\text{Non-shift}}$ | Out | When the Station Number button 1·6, 2·7, 3·8, 4·9, or 5·10 on the Remote Control Unit is pressed without pushing the Shift button on the Remote Control Unit, $\overline{\text{Non-shift}}$ and $\overline{\text{M1}}$, $\overline{\text{M2}}$, $\overline{\text{M3}}$, $\overline{\text{M4}}$, or $\overline{\text{M5}}$ become "L" simultaneously and station 1, 2, 3, 4, or 5 (not 6, 7, 8, 9, or 10) is selected.<br> Shift Button ON OFF<br>Station Number Button 1·6 ON OFF<br>Non-Shift<br>M1<br>(Station Number 1 select timing chart)<br>When one of the Station Number buttons is pressed within 2 seconds after the Shift button is pressed, $\overline{\text{Shift}}$ and one of $\overline{\text{M1}}$ through $\overline{\text{M5}}$ become "L" simultaneously and one of stations 6 through 10 is selected.<br> Shift Button ON OFF<br>Station Number Button 1·6 ON OFF<br>Shift<br>M1<br>(Station Number 6 select timing chart) |
| 13 | TEST | In | Not used. |
| 14 | Vss | In | Connected to GND. |
| 15<br>16<br>17<br>18 | $\overline{\text{M2}}$<br>$\overline{\text{M3}}$<br>$\overline{\text{M4}}$<br>$\overline{\text{M5}}$ | Out | $\overline{\text{M2}}$, $\overline{\text{M3}}$, $\overline{\text{M4}}$ and $\overline{\text{M5}}$ become "L" when Station Number buttons 2·7, 3·8, 4·9 and 5·10 on the Remote Control Unit are pressed. Refer to $\overline{\text{Shift}}$ (pin 11) and $\overline{\text{Non-shift}}$ (pin 12). (Active "L") |
| 19 | $\overline{\text{Remote}}$ | Out | Becomes L while receiving a signal from the Remote Control Unit. When $\overline{\text{Remote}}$ is "L", the indicator on the Remote Control Sensor lights up. (Active "L") |
| 20 | VDD | In | Supplied with +5 V. |
| 21 | Sin | In | Receives the output signal from IC954 (Remote Control Receiver) on the Display P.C.B. Ass'y. (Active "L") |
| 22 | P.Mute | In | Power Mute signal generated at power ON and OFF. (Active "H") |
| 23 | $\overline{\text{K.Mute}}$ | In | Becomes "L" upon push of the Audio Mute switch. (Active "L")<br>At the falling edge of $\overline{\text{K.Mute}}$, a 3-msec width pulse is output from $\overline{\text{M.PLS}}$ (pin 25) to the Audio Mute flip-flop consisting of IC605.<br>The pulse input inverts state of the flip-flop. When the Audio Mute flip-flop is set, audio muting is enabled and Audio Mute indicator lights up. |
| 24 | S.Mute | In | If the Volume Up button on the Remote Control Unit is pressed ($\overline{\text{Vol-up}}$ (pin 27) = "L") while S.Mute is at "H", i.e. while the Audio Mute flip-flop consisting of IC605 is being set and audio mute is enabled, a 3-msec width pulse is output from $\overline{\text{M.PLS}}$ (pin 25) to reset the Audio Mute flip-flop and to disable audio mute. |
| 25 | $\overline{\text{M.PLS}}$ | Out | Outputs a 3-msec width pulse which inverts state of the Audio Mute flip-flop consisting of IC605.<br>Pulse is output in the following cases. (Active "L")<br>1. When the Audio Mute switch is pressed. (Refer to $\overline{\text{K.Mute}}$ (pin 23).)<br>2. When the Volume Up button on the Remote Control Unit is pressed while audio muting is being enabled. (Refer to S.Mute (pin 24).) |
| 26 | P.IND | Out | Outputs pulse train for 4 seconds in the following cases. The green Power indicator flashes. (Active "H")<br>1. When reset is released ($\overline{\text{Reset}}$ = "H") after the Power switch is turned ON.<br>2. When power is turned ON by pressing of the Power ON/OFF button on the Remote Control Unit.<br> 4sec<br>250msec<br>250msec |
| 27<br>28 | $\overline{\text{Vol-up}}$<br>$\overline{\text{Vol-down}}$ | Out | Becomes "L" while the Volume Up/Down button on the Remote Control Unit is being pressed. (Active "L") |

### 6.2. Schematic Diagrams

### 6.2.1. Amplifier Section

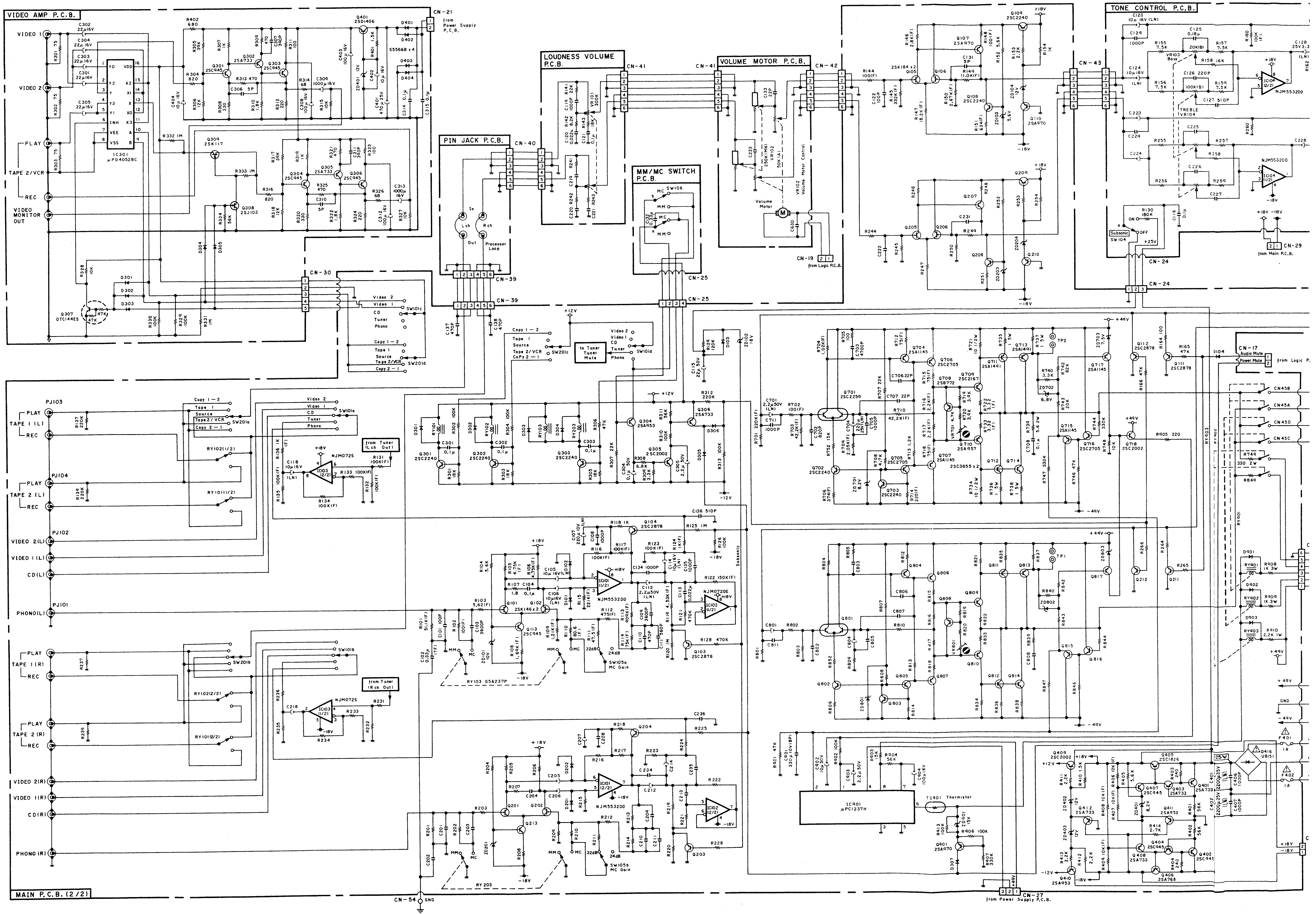
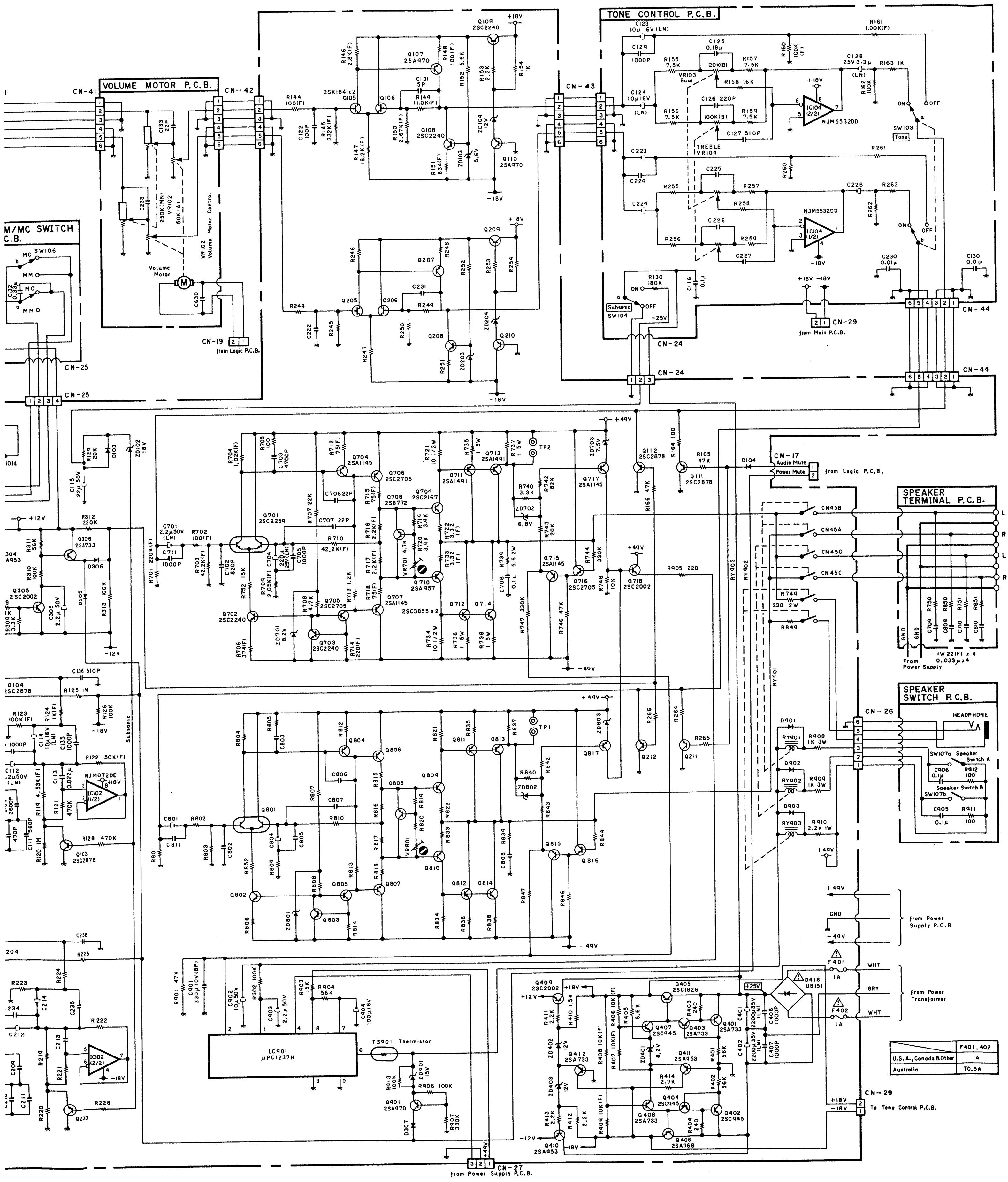

VIDEO AMP P.C.B.
VIDEO 1
VIDEO 2
PLAY
TAPE 2/VCR
REC
VIDEO MONITOR OUT
IC301 μPD4052BC
CN-21
from Power Supply P.C.B.
LOUDNESS VOLUME P.C.B.
VOLUME MOTOR P.C.B.
Volume Motor
VR102 Volume Motor Control
CN-19
from Logic P.C.B.
PIN JACK P.C.B.
In
Lch
Rch
Out
Processor Loop
MM/MC SWITCH P.C.B.
SW106
TONE CONTROL P.C.B.
VR103 Bass
TREBLE VR104
NJM5532DD
Subsonic SW104
CN-29
from Main P.C.B.
CN-30
CN-39
CN-40
CN-41
CN-42
CN-43
CN-24
CN-25
TAPE 1 (L)
TAPE 2 (L)
VIDEO 2(L)
VIDEO 1(L)
CD(L)
PHONO(L)
TAPE 1 (R)
TAPE 2 (R)
VIDEO 2(R)
VIDEO 1(R)
CD(R)
PHONO (R)
from Tuner (Lch Out)
from Tuner (Rch Out)
to Tuner Tuner Mute
NJM072S
SW105a MC Gain
SW105b MC Gain
RY103 G5A237P
RY203
IC101 NJM5532DD
IC102 NJM072DE
CN-17
Audio Mute
Power Mute
from Logic P.C.B.
IC901 μPC1237H
TS901 Thermistor
CN-27
from Power Supply P.C.B.
MAIN P.C.B. (2/2)
CN-54
GND

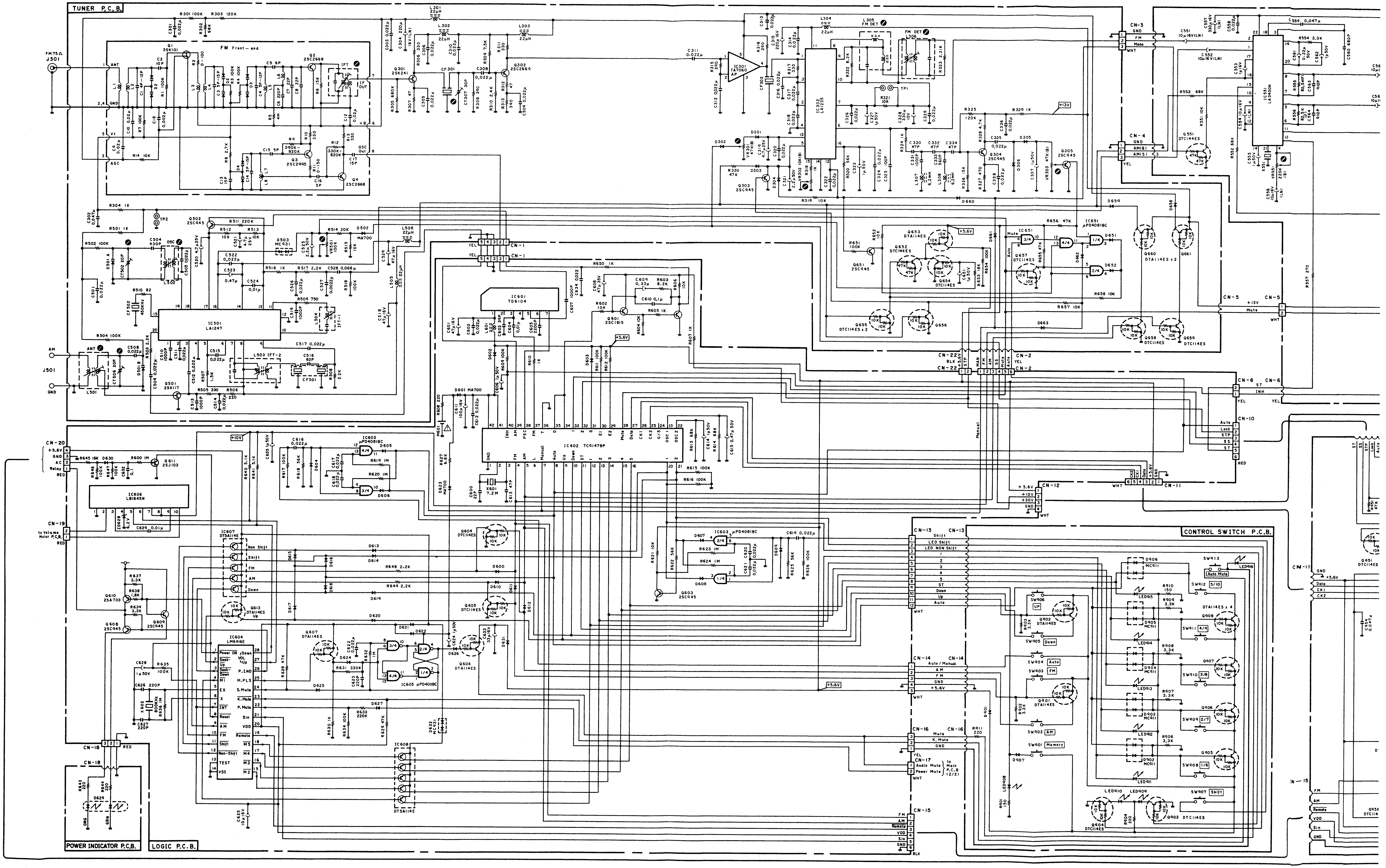
Fig. 6.2.1


VOLUME MOTOR P.C.B.
TONE CONTROL P.C.B.
SPEAKER TERMINAL P.C.B.
SPEAKER SWITCH P.C.B.
MM/MC SWITCH P.C.B.
CN-41
CN-42
CN-43
CN-44
CN-24
CN-25
CN-17
CN-19
CN-26
CN-27
CN-29
from Logic P.C.B.
from Main P.C.B.
from Power Supply P.C.B.
from Power Transformer
To Tone Control P.C.B.
Volume Motor
VR102 Volume Motor Control
SW103 Tone
SW104 Subsonic
VR103 Bass
VR104 TREBLE
IC104 NJM553200
IC102 NJM072DE
IC401 µPC1237H
TS401 Thermistor
HEADPHONE
SW107a Speaker Switch A
SW107b Speaker Switch B
Audio Mute
Power Mute
L ch
R ch
A
B
+49V
-49V
GND
+18V
-18V
WHT
GRY
F401
F402
D416 U8151
F401, 402
U.S.A., Canada & Other 1A
Australia T0.5A

Notes:
1. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
2. 2SA733, 2SA608SP, 2SA1048 and 2SA1175 are interchangeable with each other.
3. 2SC945, 2SC536SP, 2SC2458 and 2SC2785 are interchangeable with each other.

### 6.2.2. Tuner and Power Supply Section

#### (1) For SR-4A and SR-4 (Canada)



TUNER P.C.B.
FM 75Ω J301
FM Front-end
ANT
GND
AGC
Q1 3SK101
Q2 2SC2668
Q3 2SC2485
Q4 2SC2668
IFT
OSC Out
Q301 2SK241
Q302 2SC2664
CF301
IC301 TA7060AP
IC302 LA1235
FM DET
TP1
TP2
Q303 2SC945
Q304 2SC945
Q305 2SC945
D660
IC501 LA1247
Q502 2SC945
Q501 2SK117
L501
L502
L503 IFT-2
L504 IFT-1
CF301
CF502 450KHz
AM
J501
GND
IC601 TD6104
Q601 2SC1815
D601 MA700
M601
X601 7.2M
IC602 TC9147BP
IC603 μPD4081BC
IC604 LM6416E
IC605 μPD4011BC
IC606 LB1645N
IC607 DTA114E
IC608 DTA114E
Q610 2SA733
Q611 2SJ103
Q608 2SC945
Q609 2SC945
Q613 DTA114ES
Q604 DTC114ES
Q605 DTC114ES
Q606 DTA114ES
Q607 DTA114ES
Q603 2SC945
IC651 μPD4081BC
Q651 2SC945
Q652 DTC144ES
Q653 DTA114ES
Q654 DTC114ES
Q655 DTC114ES x 2
Q656
Q657 DTC114ES
Q658 DTC114ES
Q659 DTC114ES
Q660 DTA114ES x 2
Q661
IC551 LA3400N
Q551 DTC144ES
CN-1
CN-2
CN-3
CN-4
CN-5
CN-6
CN-10
CN-11
CN-12
CN-13
CN-14
CN-15
CN-16
CN-17
CN-18
CN-19
CN-20
CN-22
+5.6V
+10V
+13V
+30V
to Volume Motor P.C.B.
Audio Mute
Power Mute
to Main P.C.B. (2/2)
CONTROL SWITCH P.C.B.
SW901 Memory
SW902 AM
SW903 FM
SW904 Auto
SW905 Down
SW906 UP
SW907 Shift
SW908 1/6
SW909 2/7
SW910 3/8
SW911 4/9
SW912 5/10
SW913 Auto Mute
DTA114ES x 4
Q901 DTA114ES
Q902 DTA114ES
Q903 DTC114ES
Q904 DTC114ES
Q905
Q906
Q907
Q908
D902 MC911
D903 MC911
D904 MC911
D905 MC911
D906 MC911
LED908
LED909
LED910
LED911
LED912
LED913
LED914
LED915
LED916
POWER INDICATOR P.C.B.
LOGIC P.C.B.

Fig. 6.2.2.1 For SR-4A and SR-4 (Canada)

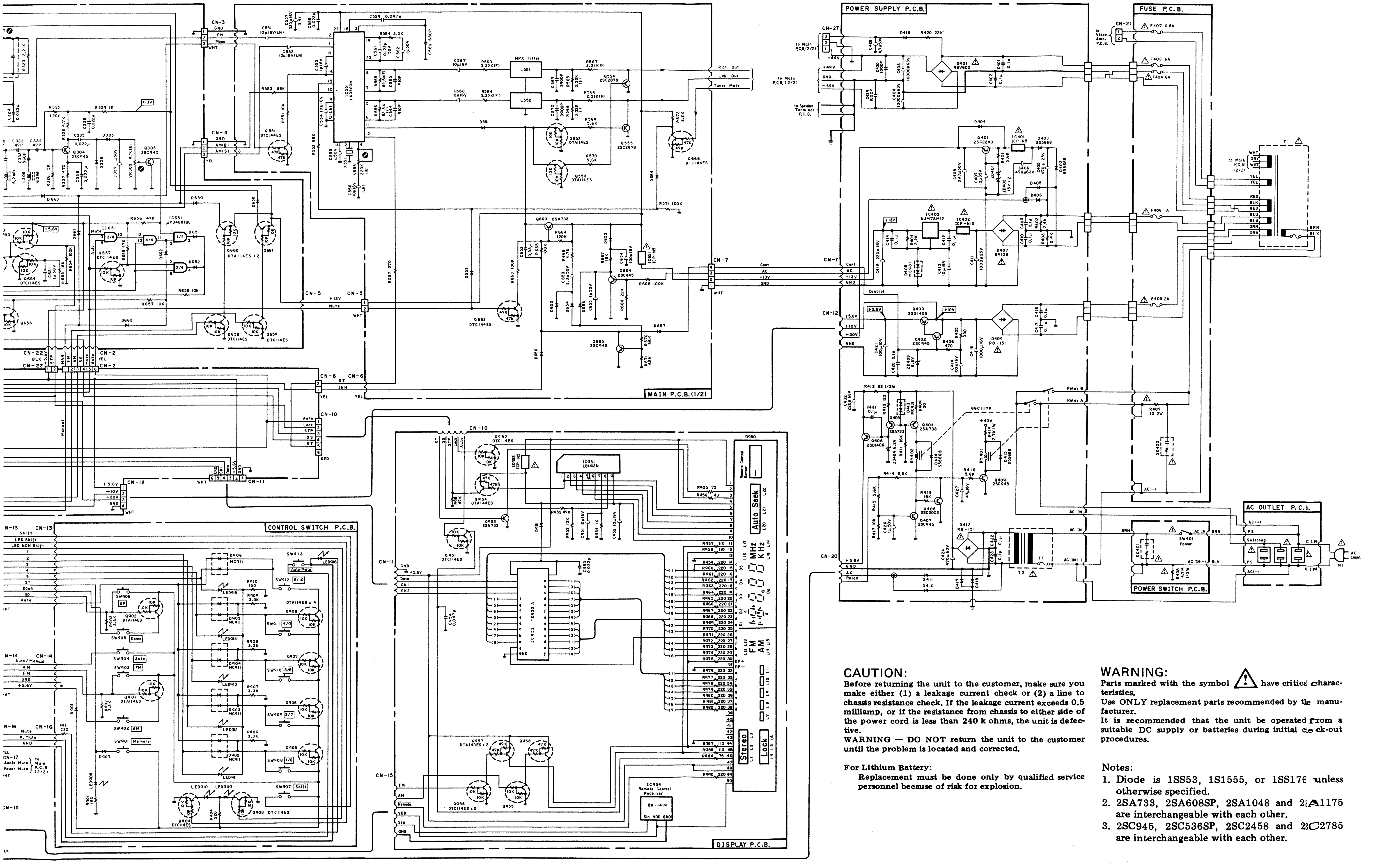

MAIN P.C.B. (1/2)
POWER SUPPLY P.C.B.
FUSE P.C.B.
CONTROL SWITCH P.C.B.
DISPLAY P.C.B.
AC OUTLET P.C.B.
POWER SWITCH P.C.B.
IC551 LA3400N
IC651 µPD4081BC
IC951 LB1413N
IC952 TD6301A
IC954 Remote Control Receiver BX-1414
IC401 ICP-N5
IC402 ICP-N15
IC403 NJM78M12
MPX Filter
L551
L552
Rch Out
Lch Out
Tuner Mute
CN-3
CN-4
CN-5
CN-6
CN-7
CN-10
CN-11
CN-12
CN-13
CN-14
CN-15
CN-16
CN-20
CN-21
CN-22
CN-27
to Main P.C.B (2/2)
to Speaker Terminal P.C.B.
to Video Amp. P.C.B.
T1
T2
TF
F407 0.5A
F403 6A
F404 6A
F406 1A
F405 2A
SW401 Power
AC Input
Relay A
Relay B
Auto Seek
MHz
KHz
FM
AM
Stereo
Lock
Remote Control Sensor
D450
SW401 Memory
SW402 AM
SW403 FM
SW404 Auto
SW405 Down
SW406 UP
SW407 Shift
SW408 1/6
SW409 2/7
SW410 3/8
SW411 4/9
SW412 5/10
SW413 Auto Mute

Fig. 6.2.2.1 For SR-4A and SR-4 (Canada)

## CAUTION:

**Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamp, or if the resistance from chassis to either side of the power cord is less than 240 k ohms, the unit is defective.**

**WARNING — DO NOT return the unit to the customer until the problem is located and corrected.**

**For Lithium Battery:**

**Replacement must be done only by qualified service personnel because of risk for explosion.**

## WARNING:

**Parts marked with the symbol ⚠ have critical characteristics.**

**Use ONLY replacement parts recommended by the manufacturer.**

**It is recommended that the unit be operated from a suitable DC supply or batteries during initial check-out procedures.**

Notes:

1. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
2. 2SA733, 2SA608SP, 2SA1048 and 2SA1175 are interchangeable with each other.
3. 2SC945, 2SC536SP, 2SC2458 and 2SC2785 are interchangeable with each other.

(2) For SR-4 (Australia)

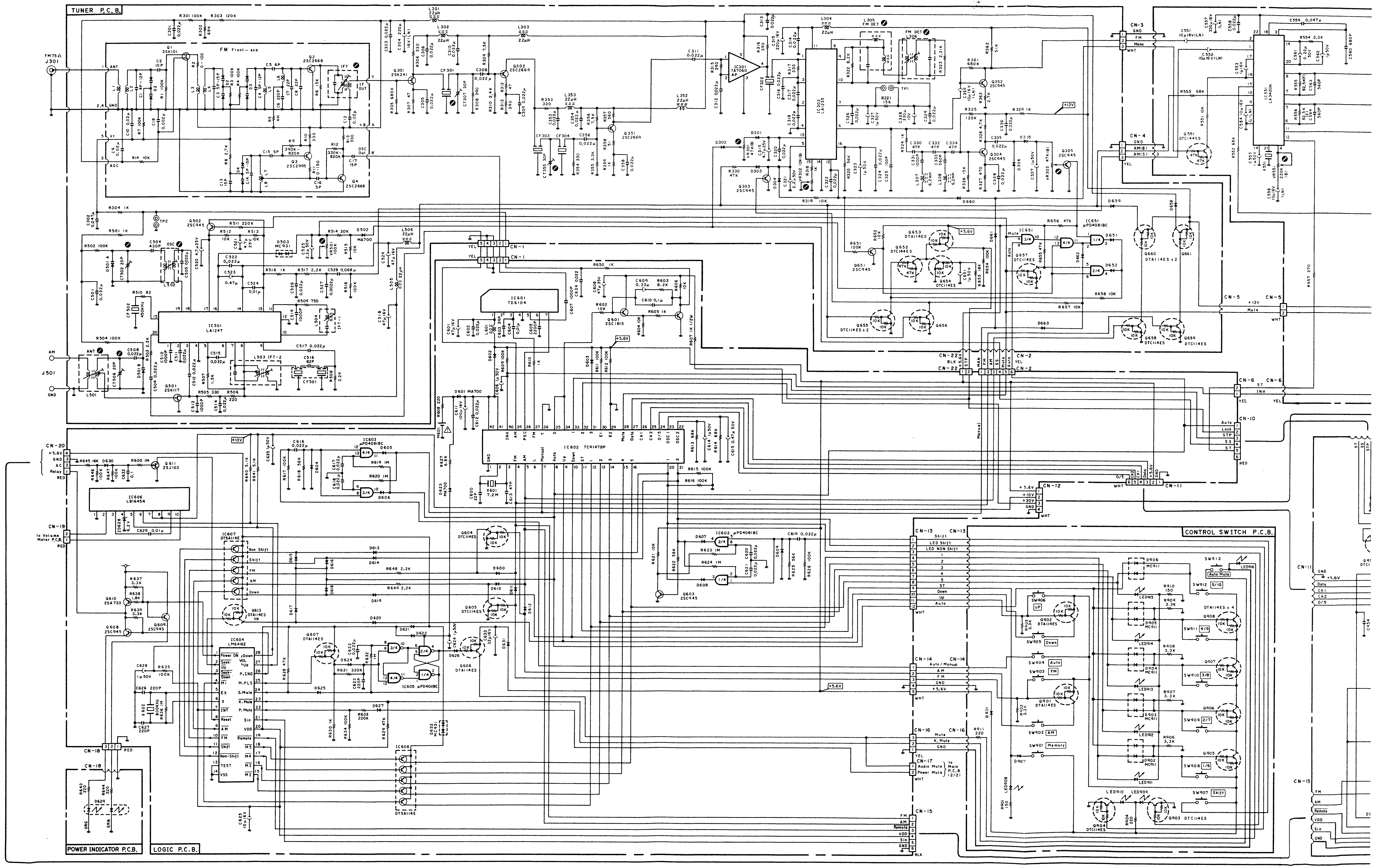

TUNER P.C.B.
FM Front-end
FM 75Ω J301
AM J501 GND
IC301 TA7060 AP
IC302 LA1235
IC551 LA3400N
IC501 LA1247
IC601 TD6104
IC602 TC9147BP
IC603 μPD4081BC
IC604 LM6416E
IC605 μPD4011BC
IC606 LB1645N
IC607 DT5A114E
IC608 DT5A114E
IC651 μPD4081BC
X601 7.2M
CN-1
CN-2
CN-3
CN-4
CN-5
CN-6
CN-10
CN-11
CN-12
CN-13
CN-14
CN-15
CN-16
CN-17
CN-18
CN-19
CN-20
CN-22
CONTROL SWITCH P.C.B.
POWER INDICATOR P.C.B.
LOGIC P.C.B.
to Volume Motor P.C.B.
to Main P.C.B (2/21)
SW901 Memory
SW902 AM
SW903 FM
SW904 Auto
SW905 Down
SW906 UP
SW907 Shift
SW908 1/6
SW909 2/7
SW910 3/8
SW911 4/9
SW912 5/10
SW913 Auto Mute
+5.6V
+10V
+13V
+30V

Fig. 6.2.2.2 For SR-4 (Australia)

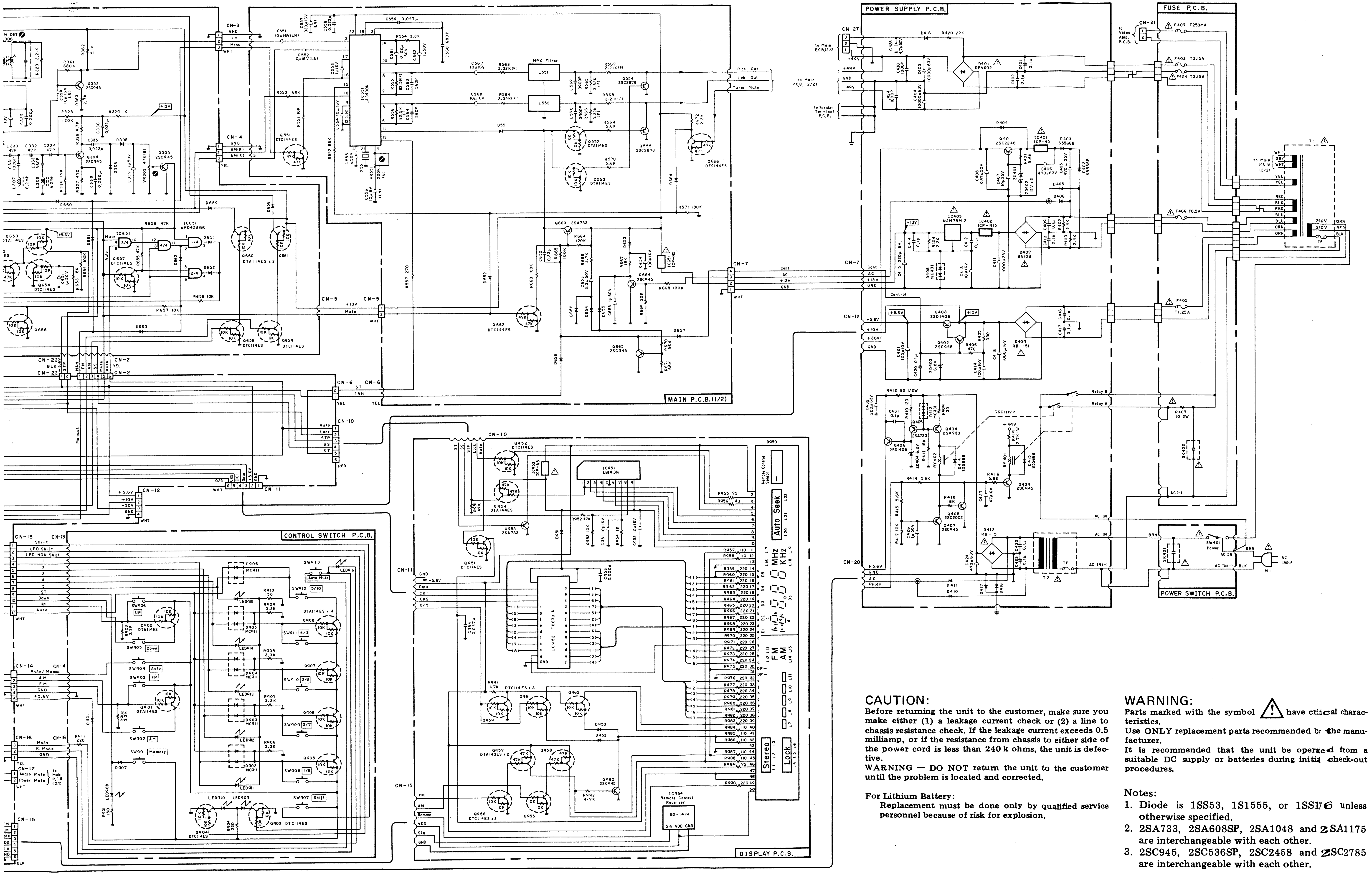

POWER SUPPLY P.C.B.
FUSE P.C.B.
MAIN P.C.B.(1/2)
CONTROL SWITCH P.C.B.
DISPLAY P.C.B.
POWER SWITCH P.C.B.
IC551 LA3400N
IC651 μPD4081BC
IC951 LB1413N
IC952 TD6301A
IC954 Remote Control Receiver BX-1414
IC401 ICP-N5
IC402 ICP-N15
IC403 NJM78M12
MPX Filter
Rch Out
Lch Out
Tuner Mute
Auto Seek
Stereo
Lock
MHz
KHz
FM
AM
240V
220V
AC Input

Fig. 6.2.2.2 For SR-4 (Australia)

## CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamp, or if the resistance from chassis to either side of the power cord is less than 240 k ohms, the unit is defective.

WARNING — DO NOT return the unit to the customer until the problem is located and corrected.

For Lithium Battery:

Replacement must be done only by qualified service personnel because of risk for explosion.

## WARNING:

Parts marked with the symbol ⚠ have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.

It is recommended that the unit be operated from a suitable DC supply or batteries during initial check-out procedures.

Notes:

1. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
2. 2SA733, 2SA608SP, 2SA1048 and 2SA1175 are interchangeable with each other.
3. 2SC945, 2SC536SP, 2SC2458 and 2SC2785 are interchangeable with each other.

### (3) For SR-4 (Other)

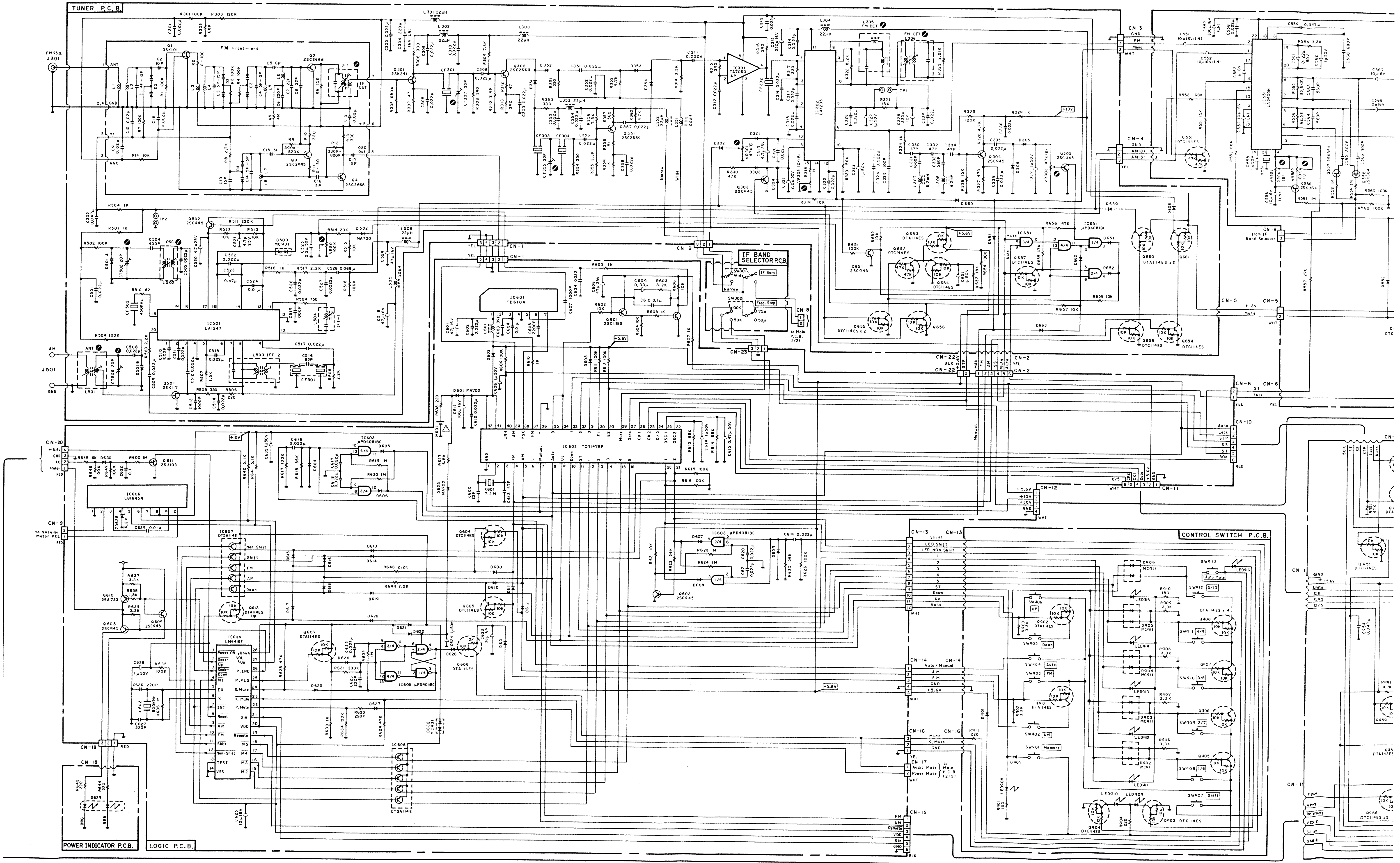

TUNER P.C.B.
FM 75Ω J301
FM Front-end
IFT
IF OUT
OSC Out
Q1 3SK101
Q2 2SC2668
Q3 2SC2995
Q4 2SC2668
Q301 2SK241
Q302 2SC2669
Q351 2SC2664
IC301 TA7060 AP
IC302 LA1235
L305 FM DET
FM DET L306
TP1
TP2
Narrow
Wide
CN-3
GND
FM
Mono
WHT
CN-4
AM(8)
AM(5)
YEL
IC551 LA3400N
Q551 DTC114ES
Q557 2SK364
Q556 2SK364
AM J501 GND
L501
IC501 LA1247
Q501 2SK117
Q502 2SC945
D503 MC931
L503 IFT-2
CF501
IFT-1
D502 MA700
CN-1
YEL
CN-9
IF BAND SELECTOR P.C.B.
SW301
Narrow
Wide
IF Band
SW302
Freq. Step
CN-8
to Main P.C.B. 11/21
CN-23
IC601 TD6104
Q601 2SC1815
IC602 TC9147BP
X601 7.2M
D601 MA700
Q651 2SC945
Q652 DTC144ES
Q653 DTA114ES
Q654 DTC114ES
Q655 DTC114ES x 2
Q656
IC651 μPD4081BC
Q657 DTC114ES
Q658 DTC114ES
Q659 DTC114ES
Q660 DTA114ES x 2
Q661
+5.6V
+13V
CN-8 from IF Band Selector
CN-5
+13V
Mute
CN-22
STP
BLK
CN-2
MAN
FM
AM
SS
Mute
YEL
CN-6
ST
INH
CN-10
Auto
Lock
STP
SS
ST
50K
RED
CN-11
O/S
CK1
Data
+5.6V
CN-12
+5.6V
+10V
+30V
GND
CN-20
+5.6V
GND
AC
Relay
RED
Q611 2SJ103
IC606 LB1645N
CN-19
to Volume Motor P.C.B.
+10V
IC603 μPD4081BC
IC607 DTA114E
Non Shift
Shift
FM
AM
Down
Q610 2SA733
Q613 DTA114ES Up
Q609 2SC945
Q608 2SC945
Q604 DTC114ES
Q605 DTC114ES
Q603 2SC945
Q607 DTA114ES
Q606 DTA114ES
IC605 μPD4011BC
IC604 LM6416E
Power ON
Seek-Up
Seek-Down
EX
INT
Reset
AM
FM
Shift
Non-Shift
TEST
VSS
Down
VOL
Up
P.IND
M.PLS
S.Mute
K.Mute
P.Mute
Sin
VDD
Remote
M5
M4
M3
M2
X602 800KHz
IC608 DTA114E
CN-18
RED
ORG
GRN
POWER INDICATOR P.C.B.
LOGIC P.C.B.
CN-13
Shift
LED Shift
LED NON Shift
ST
Down
Up
Auto
WHT
CN-14
Auto/Manual
AM
FM
GND
+5.6V
CN-16
Mute
K.Mute
GND
CN-17
Audio Mute
Power Mute
to Main P.C.B. 12/21
CN-15
FM
AM
Remote
VDD
Sin
GND
BLK
CONTROL SWITCH P.C.B.
SW913 Auto Mute
LED916
SW912 5/10
SW911 4/4
SW910 3/8
SW909 2/7
SW908 1/6
SW907 Shift
SW906 Up
SW905 Down
SW904 Auto
SW903 FM
SW902 AM
SW901 Memory
Q901 DTA114ES
Q902 DTA114ES
Q903 DTC114ES
Q904 DTC114ES
Q905
Q906
Q907
Q908
DTA114ES x 4
D901
D902 MC911
D903 MC911
D904 MC911
D905 MC911
D906 MC911
LED909
LED910
LED912
LED913
LED914
LED915
LED908
CN-11
GND
+5.6V
Data
CK1
CK2
O/S
Q951 DTC114ES
Q956 DTC114ES x 2
CN-15

Fig. 6.2.2.3 Sor SR-4 (Other)

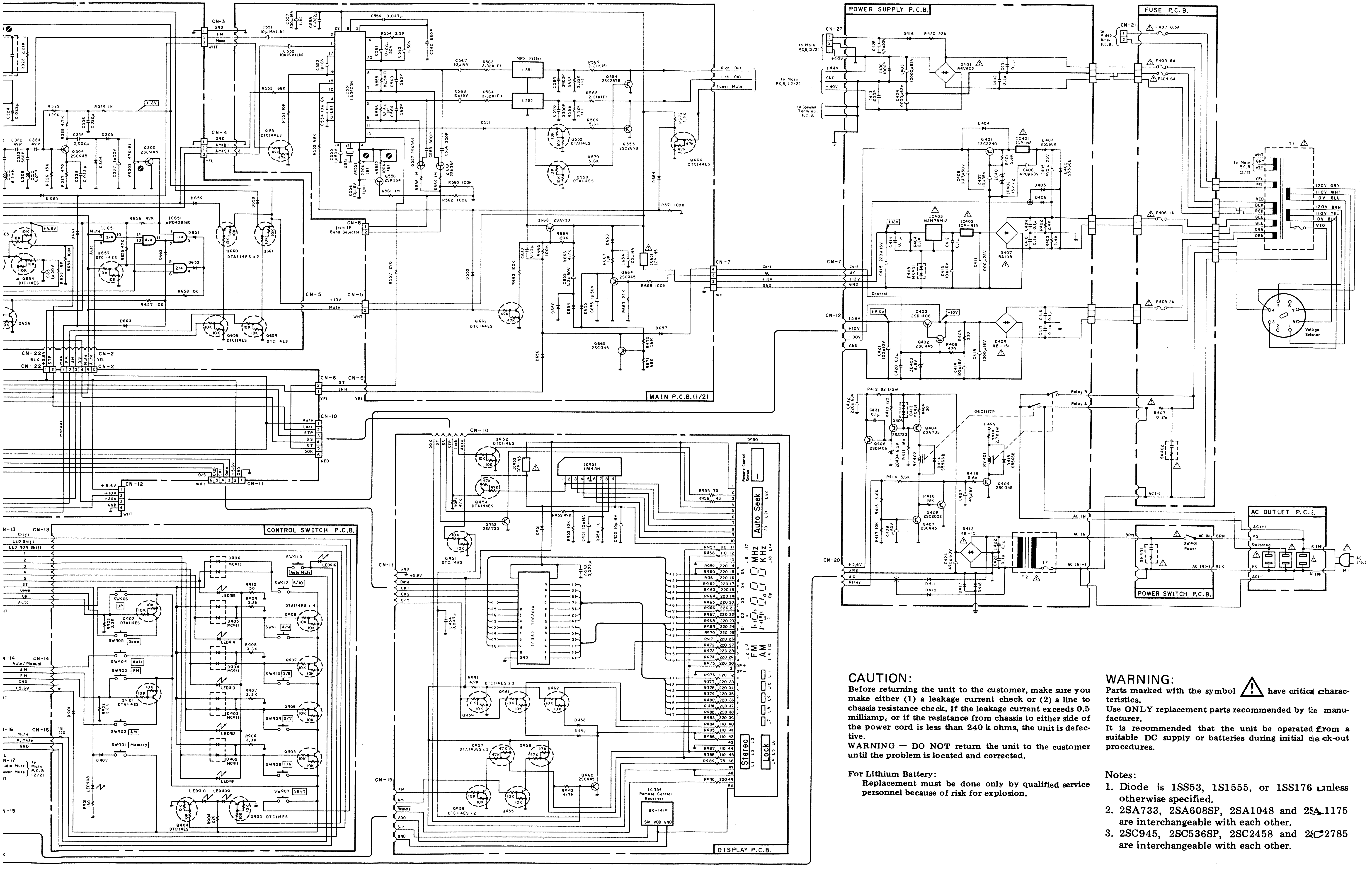

POWER SUPPLY P.C.B.
FUSE P.C.B.
MAIN P.C.B.(1/2)
CONTROL SWITCH P.C.B.
DISPLAY P.C.B.
AC OUTLET P.C.B.
POWER SWITCH P.C.B.
CN-3
CN-4
CN-5
CN-6
CN-7
CN-8
CN-10
CN-11
CN-12
CN-13
CN-14
CN-15
CN-16
CN-20
CN-21
CN-22
CN-27
MPX Filter
IC551 LA3400N
IC651 μPD4081BC
IC401 ICP-N5
IC402 ICP-N15
IC403 NJM78M12
IC951 LB1413N
IC952 TD6301A
IC954 Remote Control Receiver
BX-1419
Rch Out
Lch Out
Tuner Mute
to Main P.C.B (2/2)
to Video Amp. P.C.B.
to Speaker Terminal P.C.B.
Voltage Selector
Relay B
Relay A
SW401 Power
Auto Seek
Stereo
Lock
FM
AM
MHz
KHz
AC Input

Fig. 6.2.2.3 Sor SR-4 (Other)

## CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamp, or if the resistance from chassis to either side of the power cord is less than 240 k ohms, the unit is defective.

WARNING — DO NOT return the unit to the customer until the problem is located and corrected.

For Lithium Battery:

Replacement must be done only by qualified service personnel because of risk for explosion.

## WARNING:

Parts marked with the symbol ⚠ have critical characteristics.

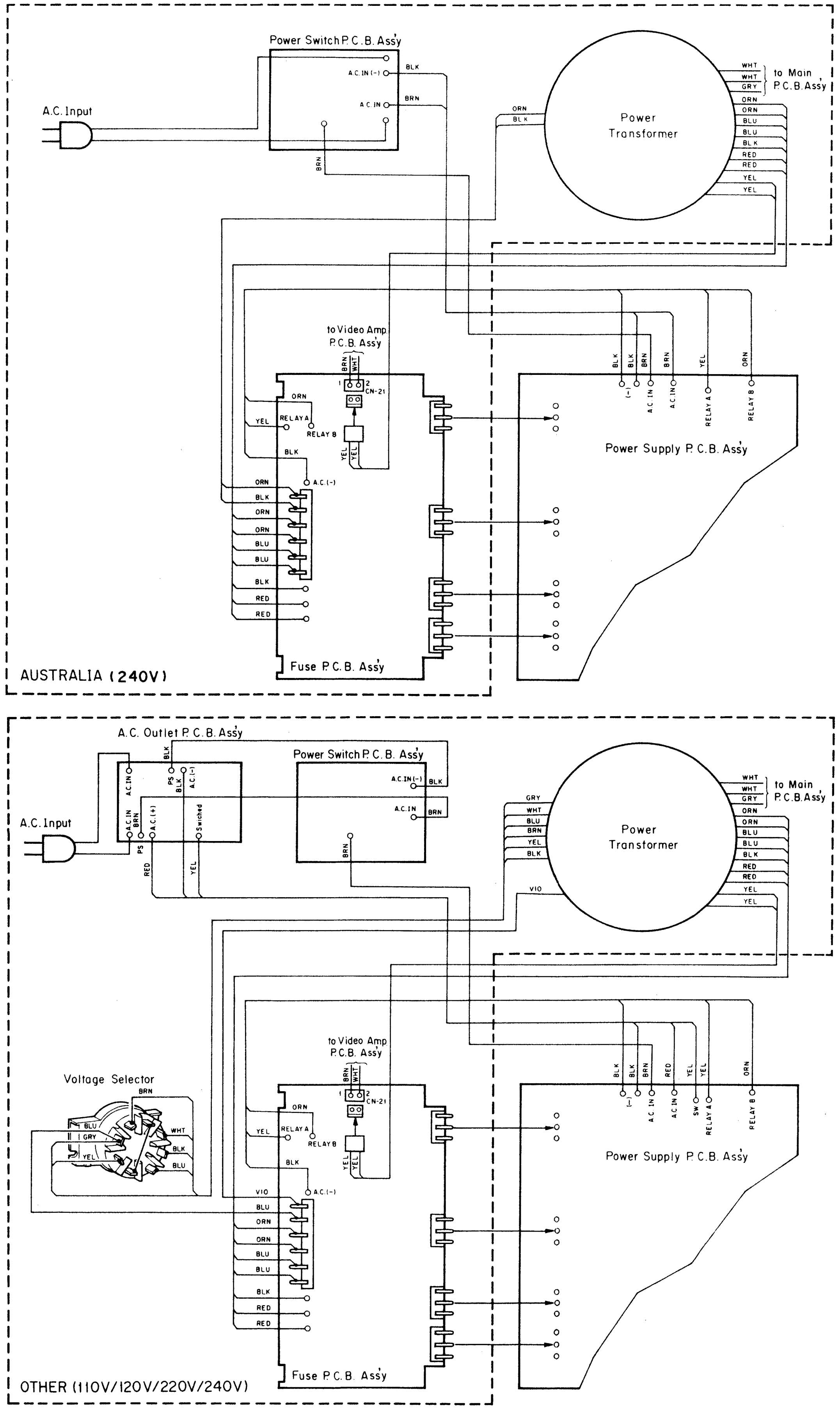
Use ONLY replacement parts recommended by the manufacturer.

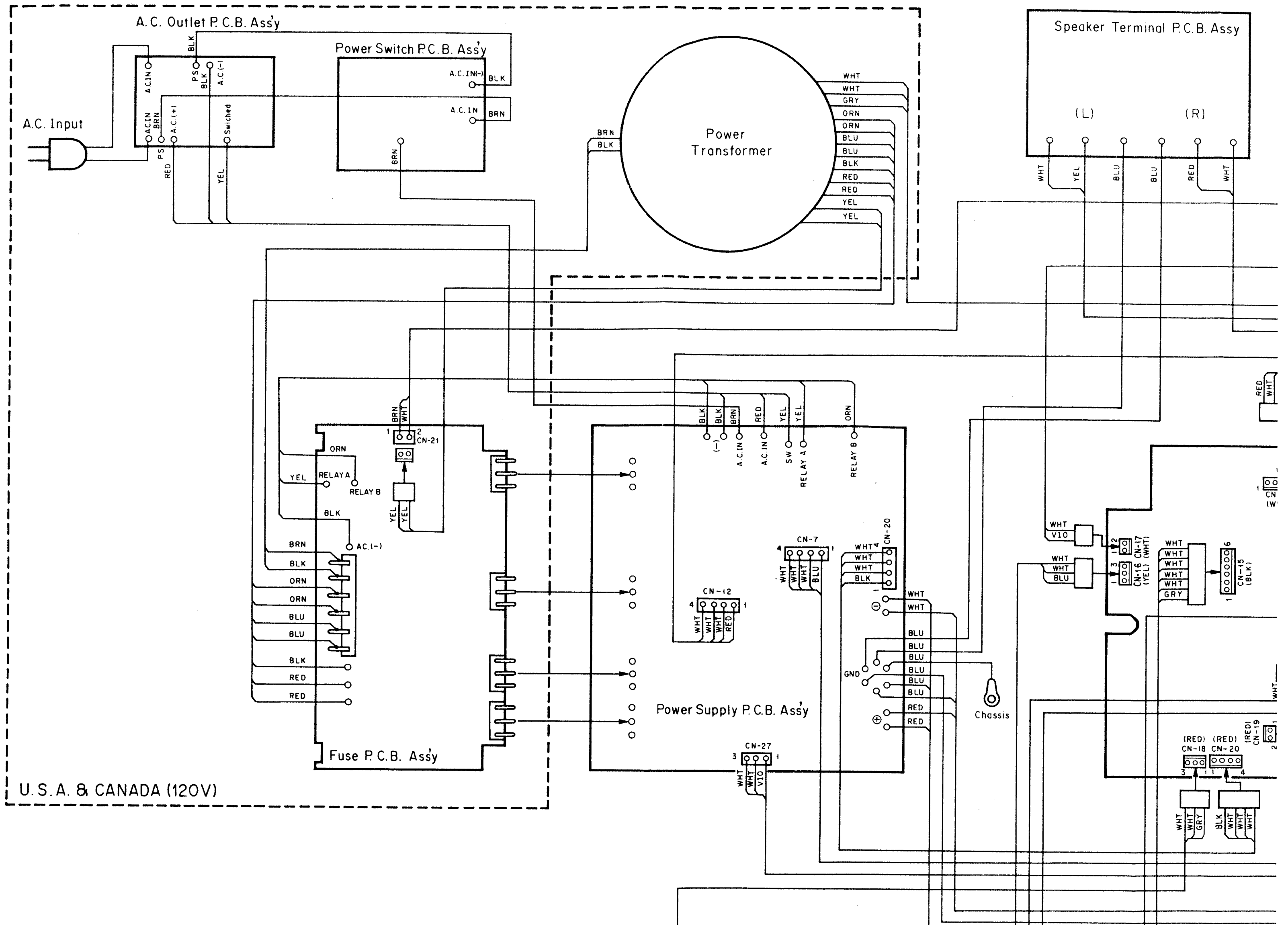
It is recommended that the unit be operated from a suitable DC supply or batteries during initial check-out procedures.

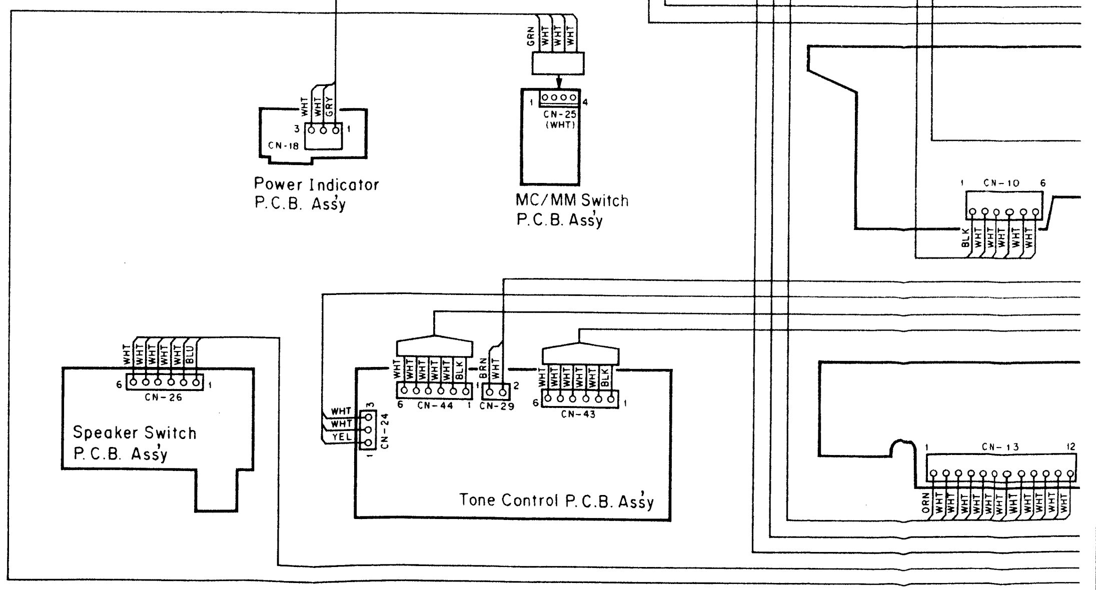
Notes:

1. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
2. 2SA733, 2SA608SP, 2SA1048 and 2SA1175 are interchangeable with each other.
3. 2SC945, 2SC536SP, 2SC2458 and 2SC2785 are interchangeable with each other.

## 7. WIRING DIAGRAM


Power Switch P.C.B. Ass'y
A.C. Input
A.C. IN (-)
A.C. IN
BLK
BRN
ORN
Power Transformer
WHT
WHT
GRY
to Main P.C.B. Ass'y
ORN
ORN
BLU
BLU
BLK
RED
RED
YEL
YEL
to Video Amp P.C.B. Ass'y
CN-21
RELAY A
RELAY B
A.C.(-)
Power Supply P.C.B. Ass'y
Fuse P.C.B. Ass'y
AUSTRALIA (240V)
A.C. Outlet P.C.B. Ass'y
PS
Switched
VIO
Voltage Selector
SW
OTHER (110V/120V/220V/240V)


A.C. Outlet P.C.B. Ass'y
A.C. Input
Power Switch P.C.B. Ass'y
Power Transformer
Speaker Terminal P.C.B. Ass'y
(L)
(R)
CN-21
RELAY A
RELAY B
CN-7
CN-12
CN-20
CN-27
GND
Chassis
Power Supply P.C.B. Ass'y
Fuse P.C.B. Ass'y
U.S.A. & CANADA (120V)
CN-16
CN-17
CN-18
CN-19
CN-20


CN-18
Power Indicator P.C.B. Ass'y
CN-25 (WHT)
MC/MM Switch P.C.B. Ass'y
CN-10
CN-26
Speaker Switch P.C.B. Ass'y
CN-24
CN-44
CN-29
CN-43
Tone Control P.C.B. Ass'y
CN-13

Notes:

1. Table of wire colors

| | |
|---|---|
| BRN — Brown | BLU — Blue |
| RED — Red | VIO — Violet |
| ORN — Orange | GRY — Gray |
| YEL — Yellow | WHT — White |
| GRN — Green | BLK — Black |

2. Component side view of the P.C.B. is illustrated unless otherwise specified.

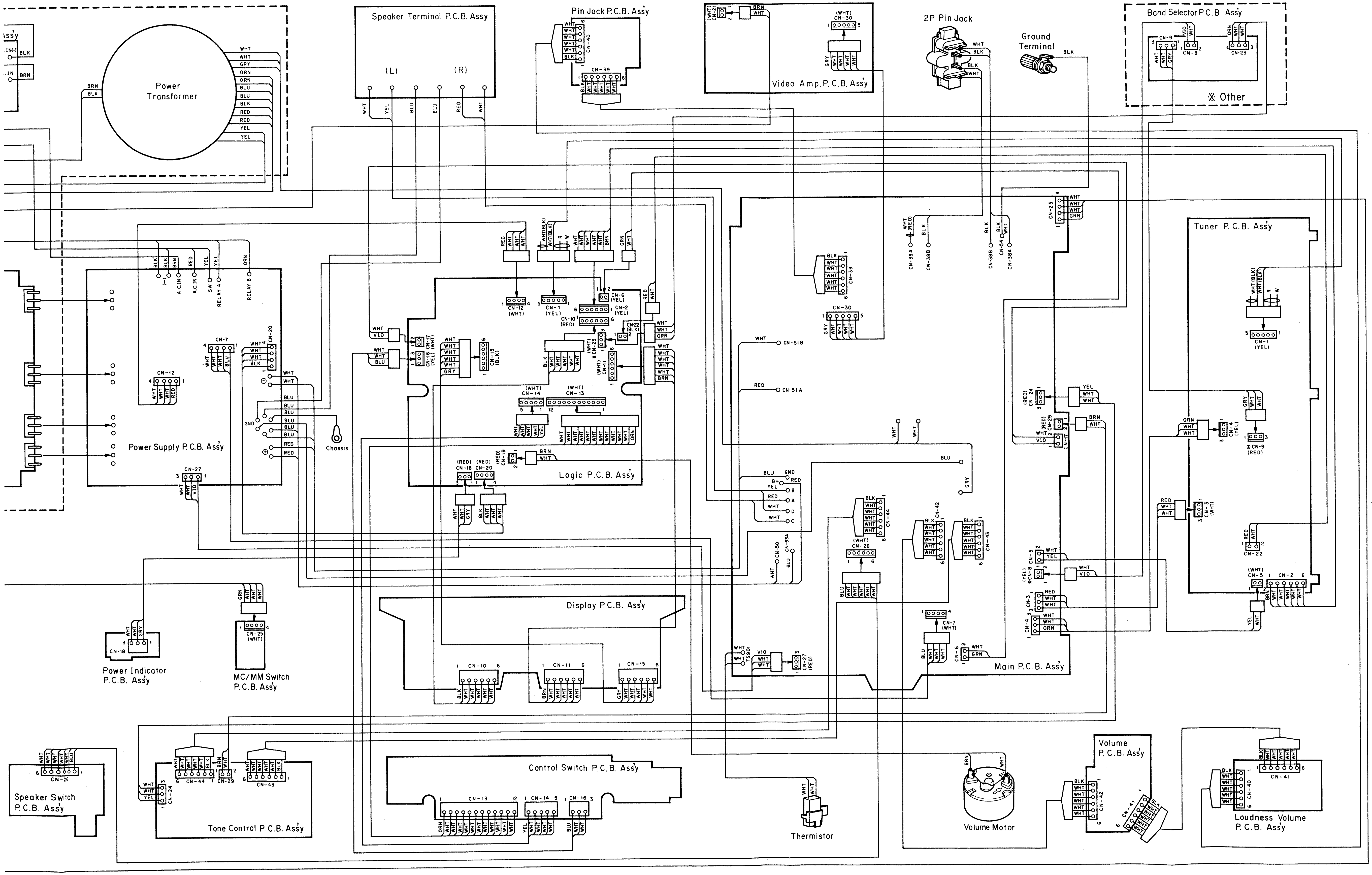

Power Transformer
Speaker Terminal P.C.B. Ass'y
(L)
(R)
Pin Jack P.C.B. Ass'y
CN-40
CN-39
Video Amp. P.C.B. Ass'y
CN-21
CN-30
2P Pin Jack
Ground Terminal
Band Selector P.C.B. Ass'y
CN-9
CN-8
CN-23
※ Other
Power Supply P.C.B. Ass'y
CN-7
CN-12
CN-20
CN-27
A.C.IN
SW
RELAY A
RELAY B
GND
Chassis
Logic P.C.B. Ass'y
CN-12
CN-1
CN-2
CN-6
CN-10
CN-22
CN-23
CN-11
CN-15
CN-16
CN-17
CN-14
CN-13
CN-18
CN-19
CN-20
CN-25
CN-38A
CN-38B
CN-54
CN-51B
CN-51A
CN-50
CN-53A
Tuner P.C.B. Ass'y
CN-1
CN-4
CN-9
CN-3
CN-22
CN-5
CN-2
Main P.C.B. Ass'y
CN-24
CN-29
CN-17
CN-5
CN-8
CN-3
CN-4
CN-6
CN-7
CN-26
CN-44
CN-42
CN-43
CN-27
TS901
Display P.C.B. Ass'y
CN-10
CN-11
CN-15
Power Indicator P.C.B. Ass'y
CN-18
MC/MM Switch P.C.B. Ass'y
CN-25
Speaker Switch P.C.B. Ass'y
CN-26
Tone Control P.C.B. Ass'y
CN-24
CN-44
CN-29
CN-43
Control Switch P.C.B. Ass'y
CN-13
CN-14
CN-16
Thermistor
Volume Motor
Volume P.C.B. Ass'y
CN-42
CN-41
Loudness Volume P.C.B. Ass'y
CN-40
CN-41

Fig. 7

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06849A | Main P.C.B. Ass'y |
| | — MPX — | |
| IC551 | 0B11245A | IC LA3400N |
| IC651 | 0B11248A | IC ICP-N5-T104 |
| Q551,662 666 | 0B10062A | TR DTC144ES |
| Q552,553 | 0B10058A | TR DTA114ES |
| Q554,555 | 0B06299A | TR 2SC2878 |
| Q663 | 0B06013A | TR 2SA733 (P,Q) |
| Q664,665 | 0B01872A | TR 2SC945L (P,Q) |
| D551,552 650,653 654,655 656,657 664 | 0B06398A | SiD 1SS176 |
| L551,552 | 0B51237A | MPX Filter TF-1042B-1013-00 |
| VR551 | 0B32066A | Semi VR 220K (B) |
| X551 | 0B90172A | Ceramic Filter CSB456F11 |
| R551 | 0B09701A | RK 10K 1/6W J |
| R552,553 671 | 0B09721A | RK 68K 1/6W J |
| R554 | 0B09689A | RK 3.3K 1/6W J |
| R555,556 | 0B25379A | RM 82.5K 1/6W F |
| R557 | 0B09663A | RK 270 1/6W J |
| R563,564 565,566 | 0B25245A | RM 3.32K 1/6W F |
| R567,568 | 0B25228A | RM 2.21K 1/6W F |
| R569,570 | 0B09695A | RK 5.6K 1/6W J |
| R571,663 665,668 | 0B09725A | RK 100K 1/6W J |
| R664 | 0B09727A | RK 120K 1/6W J |
| R666 | 0B09693A | RK 4.7K 1/6W J |
| R667 | 0B09707A | RK 18K 1/6W J |
| R669 | 0B09709A | RK 22K 1/6W J |
| R670 | 0B09719A | RK 56K 1/6W J |
| R672 | 0B09685A | RK 2.2K 1/6W J |
| C551,552 554,556 | 0B09816A | CE 10μ 16V (LN) |
| C553,555 562,655 | 0B01405A | CE 1μ 50V |
| C557 | 0B40418A | CE 330μ16V (LN) |
| C558 | 0B41290A | CM 0.022μ 50V J |
| C559 | 0B41555A | CC 0.047μ 25V Z |
| C560 | 0B09287A | CC 680P 50V K |
| C561 | 0B40023A | CE 0.22μ 50V |
| C563,564 | 0B41404A | CP 560P 50V J |
| C567,568 | 0B01412A | CE 10μ 16V |
| C569,570 | 0B41281A | CM 3900P 50V J |
| C652 | 0B41304A | CMM 0.33μ 50V J |
| C653 | 0B01863A | CE 3.3μ 50V |
| C654 | 0B01400A | CE 100μ 16V |
| CN3 | 0B82943A | 3P Connector WHT |
| CN4 | 0B82944A | 3P Connector YEL |
| CN5 | 0B81223A | 2P-T Post WHT |
| CN6 | 0B82946A | 2P Connector YEL |
| CN7 | 0B81231A | 4P-T Post WHT |
| | — Eq. Amp. — | |
| IC101 | 0B11204A | IC NJM5532DD |
| IC102 | 0B11005A | IC NJM072DE |
| Q101,102 201,202 | 0B10195A | FET 2SK146 (BL,V) |
| Q103,104 203,204 | 0B06299A | TR 2SC2878 |
| Q113,213 | 0B01872A | TR 2SC945L (P,Q) |
| D101,102 103,201 202 | 0B06398A | SiD 1SS176 |
| ZD101,201 | 0B12451A | ZD 10V UTZJ10B |
| ZD102 | 0B12469A | ZD 18V UTZJ18B |
| RY103,203 | 0B90243A | Relay G5A237P |
| R101,201 | 0B09453A | RM 51.1K 1/4W F |
| R102,202 | 0B22567A | RM 100 1/4W F |
| R103,203 | 0B22684A | RM 5.62 1/4W F |
| R104,204 | 0B09695A | RK 5.6K 1/6W J |
| R105,106 205,206 | 0B25260A | RM 4.75K 1/6W F |
| R107,207 | 0B09609A | RK 1.5 1/6W J |
| R108,208 | 0B25217A | RM 1.69K 1/6W F |
| R109,209 | 0B22635A | RM 1.21K 1/4W F |
| R110,210 | 0B09891A | RM 80.6 1/4W F |
| R111,211 | 0B22643A | RM 47.5 1/4W F |
| R112,212 | 0B22576A | RM 475 1/4W F |
| R113,213 | 0B09561A | RM 909K 1/4W F |
| R114,214 | 0B09562A | RM 75K 1/4W F |
| R115,215 | 0B25420A | RM 221K 1/6W F |
| R116,117 216,217 | 0B25387A | RM 100K 1/6W F |
| R118,218 | 0B09677A | RK 1K 1/6W J |
| R119,219 | 0B25258A | RM 4.53K 1/6W F |
| R120,125 220,225 | 0B09749A | RK 1M 1/6W J |
| R121,128 221,228 | 0B09741A | RK 470K 1/6W J |
| R122,222 | 0B25212A | RM 1.50K 1/6W F |
| R123,223 | 0B09305A | RM 100K 1/4W F |
| R124,224 | 0B09491A | RM 1K 1/4W F |
| R126 | 0B09725A | RK 100K 1/6W J |
| R129 | 0B09727A | RK 120K 1/6W J |
| C033,034 | 0B09545A | C 330P 50V J |
| C039,040 | 0B09486A | C 120P 50V J |
| C101,201 | 0B41703A | CSP 100P 50V J |
| C102,202 | 0B41304A | CMM 0.33μ 50V J |
| C103,109 203,209 | 0B41238A | CP 3600P 100V J |
| C104,204 | 0B41377A | CM 0.27μ 63V J |
| C105,106 114,205 206,214 | 0B09816A | CE 10μ 16V (LN) |
| C107,207 | 0B40422A | CE 220μ 10V (LN) |
| C108,208 | 0B41225A | CP 1000P 100V J |
| C110,210 | 0B41117A | CP 470P 100V G |
| C111,211 | 0B41119A | CP 560P 100V G |
| C112,212 | 0B09933A | CE 2.2μ 50V (LN) |
| C113,213 | 0B05582A | CM 0.022μ 50V J |
| C115 | 0B40117A | CE 22μ 50V J |
| C134,135 234,235 | 0B41791A | CSP 1000P 50V J |
| C136,236 | 0B41789A | CSP 510P 50V J |
| SW105 | 0B70078A | Slide Switch SSSP12 |
| | — Input Selector — | |
| Q301,302 303 | 0B06142A | TR 2SC2240 (BL) |
| Q304 | 0B06372A | TR 2SA953 (K,L) |
| Q305 | 0B06322A | TR 2SC2002 (K,L) |
| Q306 | 0B06013A | TR 2SA733 (P,Q) |
| D301-306 | 0B06398A | SiD 1SS176 (6) |
| RY101,102 | 0B90243A | Relay 24V G5A237P |
| L001,002 | 0B51252A | Bead Core |
| R137,139 237,239 312 | 0B09733A | RK 220K 1/6W J |
| R301,303 305 | 0B09707A | RK 18K 1/6W J |
| R302,304 310,313 | 0B09725A | RK 100K 1/6W J |
| R306 | 0B09717A | RK 47K 1/6W J |
| R307 | 0B09709A | RK 22K 1/6W J |
| R308 | 0B09697A | RK 6.8K 1/6W J |
| R309 | 0B09689A | RK 3.3K 1/6W J |
| R311 | 0B09719A | RK 56K 1/6W J |
| C005,009 010-018 029 | 0B41007A | CC 1000P 25V (12) |
| C137,138 | 0B41217A | CP 470P 100V J |
| C301,302 303 | 0B41298A | CMM 0.1μ 50V J |
| C304 | 0B40265A | CE 0.1μ 50V |
| C305 | 0B40027A | CE 2.2μ 50V |
| SW101 | 0B70100A | Slide Switch ESA26132 |
| SW201 | 0B70103A | Slide Switch ESA26572 |
| CN17 | 0B82957A | 2P Connetor WHT |
| CN24 | 0B81229A | 3P-T Post RED |
| CN25 | 0B81231A | 4P-T Post WHT |
| CN30 | 0B82968A | 5P Connector WHT |
| CN39 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82751A | PD Connector V80 (1) |
| | 0B82992A | PD Connector V150 WHT (2) |
| | 0B83007A | PD Connector V130 (1) |
| | 0B83008A | PD Connector V150 (1) |
| | 0B83009A | PD Connector V170 (1) |
| | 0B83010A | PD Connector V90 (2) |
| | 0B83002A | Ribbon Cable 6P 190mm (1) |
| | 0B81593A | 4P Pin Jack (2) |
| | 0B81594A | 6P Pin Jack (1) |
| | BA06895A | Phono Input P.C.B. Ass'y |
| | — Flat Amp. — | |
| IC103 | 0B11070A | IC NJM072S |
| Q105,106 205,206 | 0B10193A | FET 2SK184 (GR) |
| Q107,110 207,210 | 0B10050A | TR 2SA970 (BL) |
| Q108,109 208,209 | 0B06142A | TR 2SC2240 (BL) |
| Q111,112 211,212 | 0B06299A | TR 2SC2878 |
| ZD103,203 | 0B12433A | ZD 5.6V UTZJ5.6B |
| ZD104,204 | 0B12457A | ZD 12V UTZJ12B |
| D104 | 0B06398A | SiD 1SS176 |
| R131-135 231-235 | 0B25387A | RM 100K 1/6W F (10) |
| R136,236 | 0B25195A | RM 1.00K 1/6W F |
| R144,148 244,248 | 0B25099A | RM 100 1/6W F |
| R145,245 | 0B25437A | RM 332K 1/6W F |
| R146,246 | 0B25238A | RM 2.80K 1/6W F |
| R147,247 | 0B25316A | RM 18.2K 1/6W F |
| R149,249 | 0B25295A | RM 11.0K 1/6W F |
| R150,250 | 0B25236A | RM 2.67K 1/6W F |
| R151,251 | 0B25176A | RM 634 1/6W F |
| R152,252 | 0B09695A | RK 5.6K 1/6W J |
| R153,253 | 0B09685A | RK 2.2K 1/6W J |
| R154,254 | 0B09677A | RK 1K 1/6W J |
| R164,264 | 0B09653A | RK 100 1/6W J |
| R165,166 265,266 | 0B09717A | RK 47K 1/6W J |
| C037,038 | 0B41803A | C 470P 50V J |
| C118,218 | 0B09816A | CE 10μ 16V (LN) |
| C122,222 | 0B41704A | CSP 330P 50V J |
| C131,231 | 0B41609A | C 5P 50V Z |
| CN42,43 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82971A | Ribbon Cable 6P 230mm (1) |
| | — Power Amp. — | |
| Q701,801 | 0B10125A | TR 2SC2259 |
| Q702,703 802,803 | 0B06142A | TR 2SC2240 (BL) |
| Q704,707 804,807 | 0B10204A | TR 2SA1145 (O,Y) |
| Q705,706 805,806 | 0B10205A | TR 2SC2705 (O,T) |
| ZD701,801 | 0B12445A | ZD 8.2V UTZJ8.2B |
| VR701,801 | 0B32078A | Semi VR 4.7K (B) |
| R701,801 | 0B09472A | RM 220K 1/4W F |
| R702,802 | 0B22567A | RM 100 1/4W F |
| R703,710 803,810 | 0B22747A | RM 42.2K 1/4W F |
| R704,804 | 0B22550A | RM 1.02K 1/4W F |
| R705,805 | 0B01679A | RK 100 1/4W J |
| R706,806 | 0B25486A | RM 374 1/4W F |
| R707,807 | 0B24111A | RF 22K 1/2W J |
| R708,808 | 0B01846A | RK 4.7K 1/4W J |
| R709,809 | 0B22748A | RM 2.05K 1/4W F |
| R712,715 718,812 815,818 | 0B22632A | RM 75 1/4W F |
| R713,813 | 0B05623A | RK 1.2K 1/4W J |
| R714,814 | 0B25487A | RM 220 1/4W F |
| R716,717 816,817 | 0B09420A | RM 2.2K 1/4W F |
| R719,720 819,820 | 0B05675A | RK 3.9K 1/4W J |
| R721,734 821,834 | 0B24110A | RF 10 1/2W J |
| R722,733 822,833 | 0B22700A | RM 3.32 1/4W F |
| R735-738 835-838 | 0B24094A | RC 1 5W K (8) |
| R739,839 | 0B24137A | RF 5.6 2W |
| R749,849 | 0B24138A | RF 330 2W |
| R752,852 | 0B01683A | RK 15K 1/4W J |
| C035,036 | 0B41803A | C 470P 50V J |
| C701,801 | 0B09933A | CE 2.2μ 50V (LN) |
| C702,802 | 0B41223A | CP 820P 100V J |
| C703,803 | 0B41282A | CMM 4700P 50V J |
| C704,804 | 0B40421A | CE 220μ 25V (LN) |
| C705,805 | 0B41225A | CP 1000P 100V J |
| C706,806 | 0B41508A | C 56P 50V J |
| C707,807 | 0B41702A | CSP 22P 50V J |
| C708,808 | 0B41594A | CM 0.1μ 100V J |
| C711,811 | 0B41791A | CSP 1000P 50V J |
| TP1,2 | 0B81634A | 2P-T Post |
| CN44 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82980A | PD Connector V440 RED (1) |
| | 0B82981A | PD Connector V440 WHT (2) |
| | 0B82982A | PD Connector V440 YEL (1) |
| | 0B83007A | PD Connector V130 (2) |
| | — Protector — | |
| IC901 | 0B11246A | IC μPC1237H |
| Q715,717 815,817 | 0B10204A | TR 2SA1145 (O,Y) Pair |
| Q716,816 | 0B10205A | TR 2SC2705 (O,T) Pair |
| Q718 | 0B06322A | TR 2SC2002 (K,L) |
| Q901 | 0B10050A | TR 2SA970 (BL) |
| D307,901 902,903 | 0B06398A | SiD 1SS176 |
| ZD702,802 | 0B12439A | ZD 6.8V UTZJ6.8B |
| ZD703,803 | 0B12442A | ZD 7.5V UTZJ7.5B |
| ZD901 | 0B12463A | ZD 15V UTZJ15B |
| RY901,902 | 0B90199A | Relay 24V AJR32327 |
| RY903 | 0B90243A | Relay 24V G5A237P |
| R740,840 | 0B01681A | RK 3.3K 1/4W J |
| R742,842 | 0B05668A | RK 82K 1/4W J |
| R743,843 | 0B09509A | RK 20K 1/4W J |
| R744,747 844,847 907 | 0B05627A | RK 330K 1/4W J |
| R746,846 901 | 0B05641A | RK 47K 1/4W J |
| R748 | 0B01888A | RK 10K 1/4W J |
| R902,906 | 0B01889A | RK 100K 1/4W J |
| R903 | 0B01683A | RK 15K 1/4W J |
| R904 | 0B05508A | RK 56K 1/4W J |
| R905 | 0B01933A | RK 220 1/4W J |
| R908,909 | 0B24136A | RF 1K 3W |
| R910 | 0B24139A | RF 2.2K 1W |
| R913 | 0B09725A | RK 100K 1/6W J |
| C901 | 0B40408A | CE 330μ 10V (BP) |
| C902 | 0B40116A | CE 10μ 50V |
| C903 | 0B09372A | CE 2.2μ 50V |
| C904 | 0B01400A | CE 100μ 16V |
| CN26 | 0B81239A | 6P-T Post WHT |
| CN27 | 0B81229A | 3P-T Post RED |
| | — Regulator — | |
| Q401,403 408,412 | 0B06013A | TR 2SA733 (P,Q) |
| Q402,404 407 | 0B01872A | TR 2SC945L (P,Q) |
| Q405 | 0B10210A | TR 2SC1826 (O,Y) |
| Q406 | 0B10209A | TR 2SA768 (O Y) |
| Q409 | 0B06322A | TR 2SC2002 (K,L) |
| Q410,411 | 0B06372A | TR 2SA953 (K,L) |
| ZD401 | 0B12445A | ZD 8.2V UTZJ8.2B |
| ZD402,403 | 0B12457A | ZD 12V UTZJ12B |
| D416 | 0B12418A | SiD UB-151 |
| R401,402 | 0B09719A | RK 56K 1/6W J |
| R403,404 | 0B09662A | RK 240 1/6W J |
| R405 | 0B09695A | RK 5.6K 1/6W J |
| R406,407 408,409 | 0B09701A | RK 10K 1/6W J |
| R410 | 0B09681A | RK 1.5K 1/6W J |
| R411,412 413 | 0B09685A | RK 2.2K 1/6W J |
| R414 | 0B09687A | RK 2.7K 1/6W J |
| C401,402 | 0B40428A | CE 2200μ 35V (LN) |
| C406,407 | 0B41791A | CSP 1000P 50V J |
| CN29 | 0B81225A | 2P-T Post RED |
| F401,402 | 0B08457A | Fuse T500mA 250V |
| | 0B08349B | Fuse Clip (4) |
| | 0M04957A | Fuse Label T500mAx2 (1) |
| | — Miscellaneous — | |
| | 0B60431D | Main P.C.B. |
| Q708,808 | 0B06303A | TR 2SB772 (P,Q) |
| Q709,809 | 0B10206A | TR 2SC2167 Pair |
| Q710,810 | 0B10207A | TR 2SA957 Pair |
| Q711,713 811,813 | 0B10177A | TR 2SA1491 (P,Y,G) |
| Q712,714 812,814 | 0B10179A | TR 2SC3855 (P,Y,G) |
| TS901 | 0B90247A | Thermistor UP62 |
| | 0E00868A | BT3x8 ⊕ Binding (5) |
| | 0E03138A | M3x10 ⊕ Binding (14) |
| | 0J05328A | Insulator Sheet (2) |
| | 0J05329A | Main P.C.B. Holder L (1) |
| | 0J05330A | Main P.C.B. Holder R (1) |
| | 0J05349B | Thermistor Holder (1) |
| | 0J05352A | Main Heat Sink (1) |
| | **BA06895A** | **Phono Input P.C.B. Ass'y** |
| | 0B60460A | Phono Input P.C.B. |
| L101,102 201,202 | 0B51247A | Coil 20μH |
| C101,201 | 0B41508A | C 56P 50V J |
| | 0B81020A | 2P Pin Jack (1) |
| | 0B82751A | PD Connector V80 (2) |
| | 0B82750A | PD Connector V80 (1) |
| | 0B82752A | PD Connector V80 (1) |

## 3.18. Phono Input P.C.B. Ass'y

Note: This P.C.B. Ass'y is included in the Input Selector section of the Main P.C.B. Ass'y.

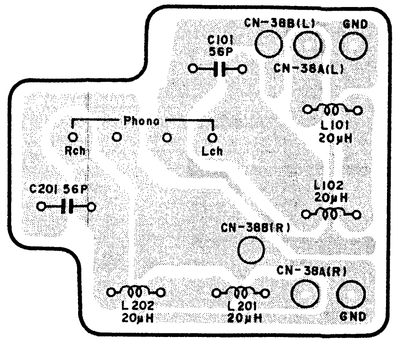


Fig. 3.18

| ription | Schematic Ref. No. | Part No. | Description |
|---|---|---|---|
| B. Ass'y | R113,213 | 0B09561A | RM 909K 1/4W F |
| | R114,214 | 0B09562A | RM 75K 1/4W F |
| | R115,215 | 0B25420A | RM 221K 1/6W F |
| | R116,117 | 0B25387A | RM 100K 1/6W F |
| 400N | 216,217 | | |
| N5-T104 | R118,218 | 0B09677A | RK 1K 1/6W J |
| 144ES | R119,219 | 0B25258A | RM 4.53K 1/6W F |
| | R120,125 | 0B09749A | RK 1M 1/6W J |
| 114ES | 220,225 | | |
| 878 | R121,128 | 0B09741A | RK 470K 1/6W J |
| 733 (P,Q) | 221,228 | | |
| 45L (P,Q) | R122,222 | 0B25212A | RM 1.50K 1/6W F |
| 76 | R123,223 | 0B09305A | RM 100K 1/4W F |
| | R124,224 | 0B09491A | RM 1K 1/4W F |
| | R126 | 0B09725A | RK 100K 1/6W J |
| | R129 | 0B09727A | RK 120K 1/6W J |
| | C033,034 | 0B09545A | C 330P 50V J |
| r | C039,040 | 0B09486A | C 120P 50V J |
| -1013-00 | C101,201 | 0B41703A | CSP 100P 50V J |
| 220K (B) | C102,202 | 0B41304A | CMM 0.33µ 50V J |
| ilter | C103,109 | 0B41238A | CP 3600P 100V J |
| 56F11 | 203,209 | | |
| 1/6W J | C104,204 | 0B41377A | CM 0.27µ 63V J |
| 1/6W J | C105,106 | 0B09816A | CE 10µ 16V (LN) |
| | 114,205 | | |
| 1/6W J | 206,214 | | |
| K 1/6W F | C107,207 | 0B40422A | CE 220µ 10V (LN) |
| 1/6W J | C108,208 | 0B41225A | CP 1000P 100V J |
| K 1/6W F | C110,210 | 0B41117A | CP 470P 100V G |
| | C111,211 | 0B41119A | CP 560P 100V G |
| K 1/6W F | C112,212 | 0B09933A | CE 2.2µ 50V (LN) |
| 1/6W J | C113,213 | 0B05582A | CM 0.022µ 50V J |
| 1/6W J | C115 | 0B40117A | CE 22µ 50V J |
| | C134,135 | 0B41791A | CSP 1000P 50V J |
| 1/6W J | 234,235 | | |
| 1/6W J | C136,236 | 0B41789A | CSP 510P 50V J |
| 1/6W J | SW105 | 0B70078A | Slide Switch SSSP12 |
| 1/6W J | | | |
| 1/6W J | | **— Input Selector —** | |
| 1/6W J | | | |
| 16V (LN) | Q301,302 | 0B06142A | TR 2SC2240 (BL) |
| | 303 | | |
| V | Q304 | 0B06372A | TR 2SA953 (K,L) |
| | Q305 | 0B06322A | TR 2SC2002 (K,L) |
| 16V (LN) | Q306 | 0B06013A | TR 2SA733 (P,Q) |
| µ 50V J | D301-306 | 0B06398A | SiD 1SS176 (6) |
| µ 25V Z | RY101,102 | 0B90243A | Relay 24V G5A237P |
| 50V K | L001,002 | 0B51252A | Bead Core |
| 50V | R137,139 | 0B09733A | RK 220K 1/6W J |
| 50V J | 237,239 | | |
| 16V | 312 | | |
| P 50V J | R301,303 | 0B09707A | RK 18K 1/6W J |
| µ 50V J | 305 | | |
| 50V | R302,304 | 0B09725A | RK 100K 1/6W J |
| 16V | 310,313 | | |
| tor WHT | R306 | 0B09717A | RK 47K 1/6W J |
| tor YEL | R307 | 0B09709A | RK 22K 1/6W J |
| WHT | R308 | 0B09697A | RK 6.8K 1/6W J |
| tor YEL | R309 | 0B09689A | RK 3.3K 1/6W J |
| WHT | R311 | 0B09719A | RK 56K 1/6W J |
| | C005,009 | 0B41007A | CC 1000P 25V |
| | 010-018 | | (12) |
| | 029 | | |
| 532DD | C137,138 | 0B41217A | CP 470P 100V J |
| 72DE | C301,302 | 0B41298A | CMM 0.1µ 50V J |
| 46 (BL,V) | 303 | | |
| | C304 | 0B40265A | CE 0.1µ 50V |
| 878 | C305 | 0B40027A | CE 2.2µ 50V |
| | SW101 | 0B70100A | Slide Switch |
| 45L (P,Q) | | | ESA26132 |
| 76 | SW201 | 0B70103A | Slide Switch |
| | | | ESA26572 |
| | CN17 | 0B82957A | 2P Connetor WHT |
| UTZJ10B | CN24 | 0B81229A | 3P-T Post RED |
| UTZJ18B | CN25 | 0B81231A | 4P-T Post WHT |
| 237P | CN30 | 0B82968A | 5P Connector WHT |
| 1/4W F | CN39 | 0B81013A | Dip Mate 6P |
| 1/4W F | | | WH6D-1 |
| 1/4W F | | 0B82751A | PD Connector V80 |
| 1/6W J | | | (1) |
| 1/6W F | | 0B82992A | PD Connector V150 |
| | | | WHT (2) |
| 1/6W J | | 0B83007A | PD Connector V130 |
| 1/6W F | | | (1) |
| 1/4W F | | 0B83008A | PD Connector V150 |
| 1/4W F | | | (1) |
| 1/4W F | | 0B83009A | PD Connector V170 |
| 1/4W F | | | (1) |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | 0B83010A | PD Connector V90 |
| | | (2) |
| | 0B83002A | Ribbon Cable 6P |
| | | 190mm (1) |
| | 0B81593A | 4P Pin Jack (2) |
| | 0B81594A | 6P Pin Jack (1) |
| | BA06895A | Phono Input P.C.B. |
| | | Ass'y |
| | **— Flat Amp. —** | |
| IC103 | 0B11070A | IC NJM072S |
| Q105,106 | 0B10193A | FET 2SK184 (GR) |
| 205,206 | | |
| Q107,110 | 0B10050A | TR 2SA970 (BL) |
| 207,210 | | |
| Q108,109 | 0B06142A | TR 2SC2240 (BL) |
| 208,209 | | |
| Q111,112 | 0B06299A | TR 2SC2878 |
| 211,212 | | |
| ZD103,203 | 0B12433A | ZD 5.6V UTZJ5.6B |
| ZD104,204 | 0B12457A | ZD 12V UTZJ12B |
| D104 | 0B06398A | SiD 1SS176 |
| R131-135 | 0B25387A | RM 100K 1/6W F |
| 231-235 | | (10) |
| R136,236 | 0B25195A | RM 1.00K 1/6W F |
| R144,148 | 0B25099A | RM 100 1/6W F |
| 244,248 | | |
| R145,245 | 0B25437A | RM 332K 1/6W F |
| R146,246 | 0B25238A | RM 2.80K 1/6W F |
| R147,247 | 0B25316A | RM 18.2K 1/6W F |
| R149,249 | 0B25295A | RM 11.0K 1/6W F |
| R150,250 | 0B25236A | RM 2.67K 1/6W F |
| R151,251 | 0B25176A | RM 634 1/6W F |
| R152,252 | 0B09695A | RK 5.6K 1/6W J |
| R153,253 | 0B09685A | RK 2.2K 1/6W J |
| R154,254 | 0B09677A | RK 1K 1/6W J |
| R164,264 | 0B09653A | RK 100 1/6W J |
| R165,166 | 0B09717A | RK 47K 1/6W J |
| 265,266 | | |
| C037,038 | 0B41803A | C 470P 50V J |
| C118,218 | 0B09816A | CE 10µ 16V (LN) |
| C122,222 | 0B41704A | CSP 330P 50V J |
| C131,231 | 0B41609A | C 5P 50V Z |
| CN42,43 | 0B81013A | Dip Mate 6P |
| | | WH6D-1 |
| | 0B82971A | Ribbon Cable 6P |
| | | 230mm (1) |
| | **— Power Amp. —** | |
| Q701,801 | 0B10125A | TR 2SC2259 |
| Q702,703 | 0B06142A | TR 2SC2240 (BL) |
| 802,803 | | |
| Q704,707 | 0B10204A | TR 2SA1145 (O,Y) |
| 804,807 | | |
| Q705,706 | 0B10205A | TR 2SC2705 (O,T) |
| 805,806 | | |
| ZD701,801 | 0B12445A | ZD 8.2V UTZJ8.2B |
| VR701,801 | 0B32078A | Semi VR 4.7K (B) |
| R701,801 | 0B09472A | RM 220K 1/4W F |
| R702,802 | 0B22567A | RM 100 1/4W F |
| R703,710 | 0B22747A | RM 42.2K 1/4W F |
| 803,810 | | |
| R704,804 | 0B22550A | RM 1.02K 1/4W F |
| R705,805 | 0B01679A | RK 100 1/4W J |
| R706,806 | 0B25486A | RM 374 1/4W F |
| R707,807 | 0B24111A | RF 22K 1/2W J |
| R708,808 | 0B01846A | RK 4.7K 1/4W J |
| R709,809 | 0B22748A | RM 2.05K 1/4W F |
| R712,715 | 0B22632A | RM 75 1/4W F |
| 718,812 | | |
| 815,818 | | |
| R713,813 | 0B05623A | RK 1.2K 1/4W J |
| R714,814 | 0B25487A | RM 220 1/4W F |
| R716,717 | 0B09420A | RM 2.2K 1/4W F |
| 816,817 | | |
| R719,720 | 0B05675A | RK 3.9K 1/4W J |
| 819,820 | | |
| R721,734 | 0B24110A | RF 10 1/2W J |
| 821,834 | | |
| R722,733 | 0B22700A | RM 3.32 1/4W F |
| 822,833 | | |
| R735-738 | 0B24094A | RC 1 5W K |
| 835-838 | | (8) |
| R739,839 | 0B24137A | RF 5.6 2W |
| R749,849 | 0B24138A | RF 330 2W |
| R752,852 | 0B01683A | RK 15K 1/4W J |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| C035,036 | 0B41803A | C 470P 50V J |
| C701,801 | 0B09933A | CE 2.2µ 50V (LN) |
| C702,802 | 0B41223A | CP 820P 100V J |
| C703,803 | 0B41282A | CMM 4700P 50V J |
| C704,804 | 0B40421A | CE 220µ 25V (LN) |
| C705,805 | 0B41225A | CP 1000P 100V J |
| C706,806 | 0B41508A | C 56P 50V J |
| C707,807 | 0B41702A | CSP 22P 50V J |
| C708,808 | 0B41594A | CM 0.1µ 100V J |
| C711,811 | 0B41791A | CSP 1000P 50V J |
| TP1,2 | 0B81634A | 2P-T Post |
| CN44 | 0B81013A | Dip Mate 6P |
| | | WH6D-1 |
| | 0B82980A | PD Connector V440 |
| | | RED (1) |
| | 0B82981A | PD Connector V440 |
| | | WHT (2) |
| | 0B82982A | PD Connector V440 |
| | | YEL (1) |
| | 0B83007A | PD Connector V130 |
| | | (2) |
| | **— Protector —** | |
| IC901 | 0B11246A | IC µPC1237H |
| Q715,717 | 0B10204A | TR 2SA1145 (O,Y) |
| 815,817 | | Pair |
| Q716,816 | 0B10205A | TR 2SC2705 (O,T) |
| | | Pair |
| Q718 | 0B06322A | TR 2SC2002 (K,L) |
| Q901 | 0B10050A | TR 2SA970 (BL) |
| D307,901 | 0B06398A | SiD 1SS176 |
| 902,903 | | |
| ZD702,802 | 0B12439A | ZD 6.8V UTZJ6.8B |
| ZD703,803 | 0B12442A | ZD 7.5V UTZJ7.5B |
| ZD901 | 0B12463A | ZD 15V UTZJ15B |
| RY901,902 | 0B90199A | Relay 24V |
| | | AJR32327 |
| RY903 | 0B90243A | Relay 24V G5A237P |
| R740,840 | 0B01681A | RK 3.3K 1/4W J |
| R742,842 | 0B05668A | RK 82K 1/4W J |
| R743,843 | 0B09509A | RK 20K 1/4W J |
| R744,747 | 0B05627A | RK 330K 1/4W J |
| 844,847 | | |
| 907 | | |
| R746,846 | 0B05641A | RK 47K 1/4W J |
| 901 | | |
| R748 | 0B01888A | RK 10K 1/4W J |
| R902,906 | 0B01889A | RK 100K 1/4W J |
| R903 | 0B01683A | RK 15K 1/4W J |
| R904 | 0B05508A | RK 56K 1/4W J |
| R905 | 0B01933A | RK 220 1/4W J |
| R908,909 | 0B24136A | RF 1K 3W |
| R910 | 0B24139A | RF 2.2K 1W |
| R913 | 0B09725A | RK 100K 1/6W J |
| C901 | 0B40408A | CE 330µ 10V (BP) |
| C902 | 0B40116A | CE 10µ 50V |
| C903 | 0B09372A | CE 2.2µ 50V |
| C904 | 0B01400A | CE 100µ 16V |
| CN26 | 0B81239A | 6P-T Post WHT |
| CN27 | 0B81229A | 3P-T Post RED |
| | **— Regulator —** | |
| Q401,403 | 0B06013A | TR 2SA733 (P,Q) |
| 408,412 | | |
| Q402,404 | 0B01872A | TR 2SC945L (P,Q) |
| 407 | | |
| Q405 | 0B10210A | TR 2SC1826 (O,Y) |
| Q406 | 0B10209A | TR 2SA768 (O Y) |
| Q409 | 0B06322A | TR 2SC2002 (K,L) |
| Q410,411 | 0B06372A | TR 2SA953 (K,L) |
| ZD401 | 0B12445A | ZD 8.2V UTZJ8.2B |
| ZD402,403 | 0B12457A | ZD 12V UTZJ12B |
| D416 | 0B12418A | SiD UB-151 |
| R401,402 | 0B09719A | RK 56K 1/6W J |
| R403,404 | 0B09662A | RK 240 1/6W J |
| R405 | 0B09695A | RK 5.6K 1/6W J |
| R406,407 | 0B09701A | RK 10K 1/6W J |
| 408,409 | | |
| R410 | 0B09681A | RK 1.5K 1/6W J |
| R411,412 | 0B09685A | RK 2.2K 1/6W J |
| 413 | | |
| R414 | 0B09687A | RK 2.7K 1/6W J |
| C401,402 | 0B40428A | CE 2200µ 35V |
| | | (LN) |
| C406,407 | 0B41791A | CSP 1000P 50V J |
| CN29 | 0B81225A | 2P-T Post RED |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| F401,402 | 0B08457A | Fuse T500mA 250V |
| | 0B08349B | Fuse Clip (4) |
| | 0M04957A | Fuse Label |
| | | T500mAx2 (1) |
| | **— Miscellaneous —** | |
| | 0B60431D | Main P.C.B. |
| Q708,808 | 0B06303A | TR 2SB772 (P,Q) |
| Q709,809 | 0B10206A | TR 2SC2167 Pair |
| Q710,810 | 0B10207A | TR 2SA957 Pair |
| Q711,713 | 0B10177A | TR 2SA1491 |
| 811,813 | | (P,Y,G) |
| Q712,714 | 0B10179A | TR 2SC3855 |
| 812,814 | | (P,Y,G) |
| TS901 | 0B90247A | Thermistor UP62 |
| | 0E00868A | BT3x8 ⊕Binding (5) |
| | 0E03138A | M3x10 ⊕Binding |
| | | (14) |
| | 0J05328A | Insulator Sheet (2) |
| | 0J05329A | Main P.C.B. Holder L |
| | | (1) |
| | 0J05330A | Main P.C.B. Holder R |
| | | (1) |
| | 0J05349B | Thermistor Holder |
| | | (1) |
| | 0J05352A | Main Heat Sink (1) |
| | **BA06895A** | **Phono Input P.C.B. Ass'y** |
| | 0B60460A | Phono Input P.C.B. |
| L101,102 | 0B51247A | Coil 20µH |
| 201,202 | | |
| C101,201 | 0B41508A | C 56P 50V J |
| | 0B81020A | 2P Pin Jack (1) |
| | 0B82751A | PD Connector V80 |
| | | (2) |
| | 0B82750A | PD Connector V80 |
| | | (1) |
| | 0B82752A | PD Connector V80 |
| | | (1) |

### 3.18. Phono Input P.C.B. Ass'y

Note: This P.C.B. Ass'y is included in the Input Selector section of the Main P.C.B. Ass'y.

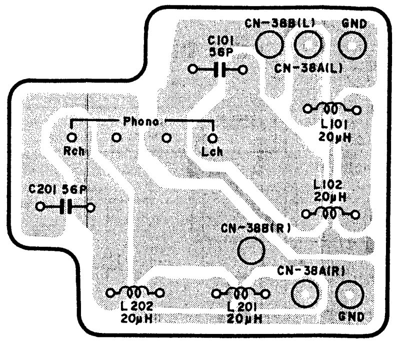


Fig. 3.18

# Service Information

Nakamichi

Model Nakamichi SR-4E (Germany)
(Stereo Receiver)

Serial No. from D10601001 -

Subject Service Manual for SR-4E (Germany)

No. OOD-SI-3104 (1/24)

Date 24 August 1987

## CONTENTS

1. **General** . . . . . . . . 1
2. **Mechanism Ass'y and Parts List** . . . . . . . . 2
   - 2. 1. Synthesis . . . . . . . . 2
   - 2. 2. Front Panel Ass'y (A01) . . . . . . . . 3
   - 2. 3. Chassis Ass'y (A02) . . . . . . . . 4
   - 2. 4. Rear Panel Ass'y (B01) . . . . . . . . 5
3. **Mounting Diagrams and Parts List** . . . . . . . . 6
   - 3. 1. Power Switch P.C.B. Ass'y . . . . . . . . 6
   - 3. 2. Pin Jack P.C.B. Ass'y . . . . . . . . 6
   - 3. 3. Power Indicator P.C.B. Ass'y . . . . . . . . 6
   - 3. 4. MM/MC Switch P.C.B. Ass'y . . . . . . . . 6
   - 3. 5. Speaker Switch P.C.B. Ass'y . . . . . . . . 6
   - 3. 6. Loudness Volume P.C.B. Ass'y . . . . . . . . 7
   - 3. 7. Volume Motor P.C.B. Ass'y . . . . . . . . 7
   - 3. 8. Speaker Terminal P.C.B. Ass'y . . . . . . . . 8
   - 3. 9. Tone Control P.C.B. Ass'y . . . . . . . . 8
   - 3. 10. Fuse P.C.B. Ass'y . . . . . . . . 9
   - 3. 11. Video Amp. P.C.B. Ass'y . . . . . . . . 10
   - 3. 12. Control Switch P.C.B. Ass'y . . . . . . . . 11
   - 3. 13. Power Supply P.C.B. Ass'y . . . . . . . . 12
   - 3. 14. Logic P.C.B. Ass'y . . . . . . . . 14
   - 3. 15. Display P.C.B. Ass'y . . . . . . . . 16
   - 3. 16. Tuner P.C.B. Ass'y . . . . . . . . 17
   - 3. 17. Main P.C.B. Ass'y . . . . . . . . 18
   - 3. 18. Phono Input P.C.B. Ass'y . . . . . . . . 19
4. **Schematic Diagrams** . . . . . . . . 20
   - 4. 1. Amplifier Section . . . . . . . . 20
   - 4. 2. Tuner and Power Supply Section . . . . . . . . 21
5. **Wiring Diagram** . . . . . . . . 22
6. **Specifications** . . . . . . . . 23

## 1. GENERAL

### 1.1. Introduction

For the following items, refer to the Service Manual SR-4/SR-4A which has already been issued by Nakamichi.

- o Parts Location for Electrical Adjustment
- o Electrical Adjustments: Apply the adjustment procedures for Australia version.
- o IC Block Diagrams
- o Block Diagrams

### 1.2. Package Ass'y and Accessory Ass'y

| Schematic Ref. No. | Part No. | Description | Q'ty | Schematic Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|---|---|---|
| | FA03594A | Package Ass'y (SR-4E (Germany)) | 1 | | DA04056A | Accessory Ass'y (SR-4E (Germany)) | 1 |
| 01 | 0F04058A | Carton Box (SR-4E) | 1 | 01 | 0B90070A | AM Loop Antenna Holder | 1 |
| 02 | 0F04041A | Packing L | 1 | 02 | 0B90081A | Feeder Antenna | 1 |
| 03 | 0F04042A | Packing R | 1 | 03 | 0B90208A | Antenna Adapter EP | 1 |
| 04 | 0F03670A | Poly-Sheet | 1 | 04 | 0B90198A | AM Loop Antenna | 1 |
| | | | | 05 | 0B90242A | Battery | 1 |
| | | | | 06 | DA04042A | Remote Control Unit | 1 |
| | | | | — | 0D03092B | Poly-Bag 320x340x0.08 | 1 |
| | | | | — | 0D04449A | Important Notice Card | 1 |
| | | | | — | 0D04764B | Owner's Manual SR-4E/3E/2E, SR-4/3/2 (English/German/French) | 1 |
| | | | | — | 0F04043A | Poly-Bag 80x150 | 1 |

## 2. MECHANISM ASS'Y AND PARTS LIST

### 2.1. Synthesis

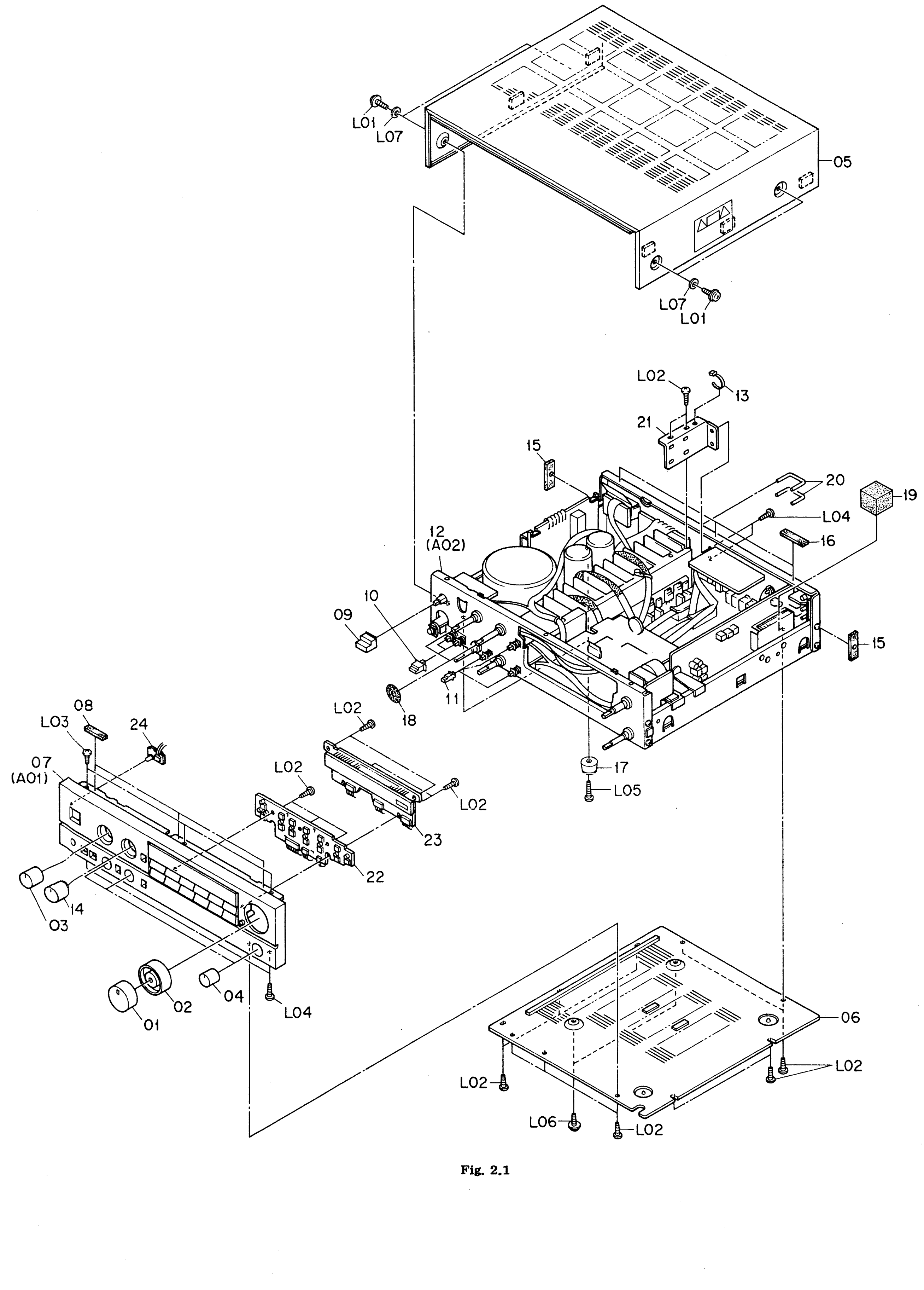

L01
L07
05
L07
L01
L02
13
21
15
20
19
L04
16
12
(A02)
10
09
15
18
11
17
L05
08
L03
24
L02
07
(A01)
L02
L02
23
22
03
14
02
04
01
L04
06
L02
L02
L06
L02

Fig. 2.1

### 2.2. Front Panel Ass'y (A01)

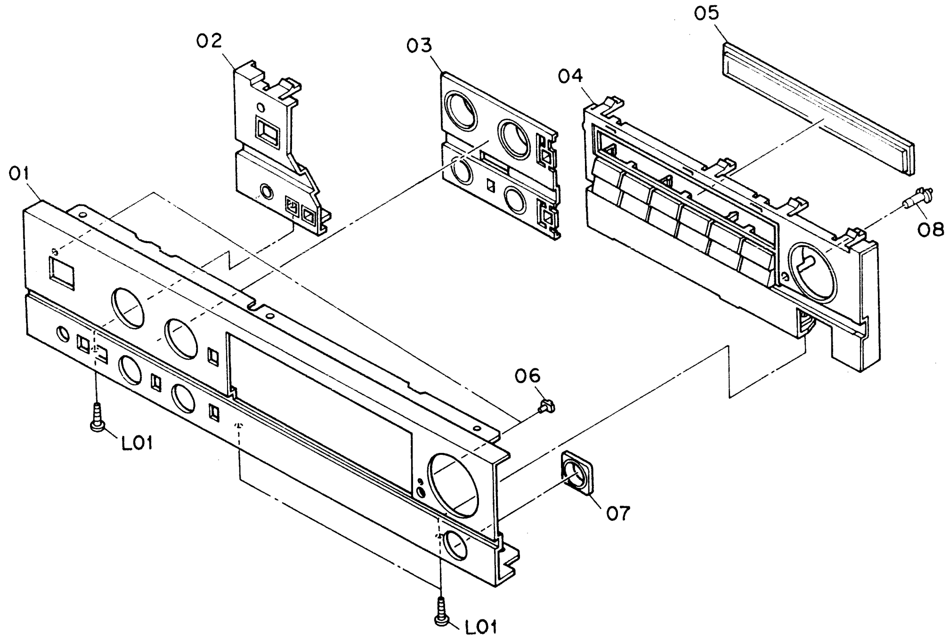


Fig. 2.2

| Schematic Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|
| | | Synthesis<br>Serial No.: D10601001 - | |
| 01 | HA05241A | Volume Knob Ass'y | 1 |
| 02 | HA05242A | Balance Knob Ass'y | 1 |
| 03 | HA05105A | Selector Knob Ass'y | 1 |
| 04 | HA05106A | Tone Control Knob Ass'y | 3 |
| 05 | HA05234A | Top Cover Ass'y (Consisting of the followings:) | 1 |
| | (0H04934C) | Top Cover | (1) |
| | (0J05261A) | Top Cover Cushion | (5) |
| | (0M04377B) | Caution Label | (1) |
| | (MA01001A) | F. Code Labels | (1) |
| 06 | JA04283A | Bottom Cover Ass'y (Consisting of the followings:) | 1 |
| | (0E00888A) | BT3x12 ⊕ Binding | (2) |
| | (0J05162A) | Leg T-S | (2) |
| | (0J05309A) | BS Damper 1 VR | (2) |
| | (0J05324C) | Bottom Cover | (1) |
| | (0J05367A) | Heat Sink Cushion | (1) |
| | (0M04377B) | Caution Label | (1) |
| 07 | HA05271A | Front Panel Ass'y (SR-4E (Germany)) | 1 |
| 08 | 0J05364A | Top Cover Cushion T4 | 5 |
| 09 | 0H04947A | Power Switch Knob | 1 |
| 10 | 0H04950B | Push Switch Knob 10L | 2 |
| 11 | 0H04949B | Push Switch Knob 5L | 3 |
| 12 | JA04289A | Chassis Ass'y (SR-4E (Germany)) | 1 |
| 13 | 0B90019A | Insu-Lock SKB80 | 37 |
| 14 | HA05243A | Selector Knob Ass'y | 1 |
| 15 | 0J05226A | Side Cushion | 2 |
| 16 | 0J05363A | Top Cover Cushion T3 | 3 |
| 17 | 0J05162A | Leg T-S | 2 |
| 18 | 0J05258B | Selector Knob Himelon | 2 |
| 19 | 0J05365A | Front-end Cushion | 1 |
| 20 | 0B90256A | U-shape Pin 14 | 2 |
| 21 | 0J05204B | Heat Sink Holder C | 1 |
| 22 | BA06593A | Control Switch P.C.B. Ass'y | 1 |
| 23 | BA06646A | Display P.C.B. Ass'y | 1 |
| 24 | BA06645A | Power Indicator P.C.B. Ass'y | 1 |
| L01 | 0E03032A | BT4x8 ⊕ Pan Washer-faced (Black Chromate) | 4 |
| L02 | 0E00868A | BT3x8 ⊕ Binding | 19 |
| L03 | 0E00857A | BT3x6 ⊕ Binding | 3 |
| L04 | 0E00921A | BT3x8 ⊕ Binding (Black Chromate) | 4 |
| L05 | 0E00888A | BT3x12 ⊕ Binding | 2 |
| L06 | 0E03157A | BT3x8 ⊕ Binding with Washer | 2 |
| L07 | 0E03410A | Washer 4.3x8x0.8 | 4 |
| — | 0M04897A | Serial No. Seal | 1 |
| — | 0M04952A | DBP Label | 1 |

| Schematic Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|
| A01 | HA05271A | **Front Panel Ass'y (SR-4E (Germany))**<br>Serial No.: D10601001 - | 1 |
| 01 | 0H05086A | Front Panel | 1 |
| 02 | 0H04935C | Front Escutcheon L | 1 |
| 03 | 0H04936A | Front Escutcheon C | 1 |
| 04 | HA05224A | Front Escutcheon R Ass'y | 1 |
| 05 | 0H04938A | Display Lens | 1 |
| 06 | 0H05039A | Power Lens | 2 |
| 07 | 0H05040A | Loudness Escutcheon | 1 |
| 08 | 0H05041A | Muting Switch Knob | 1 |
| L01 | 0E00921A | BT3x8 ⊕ Binding (Black Chromate) | 3 |

### 2.3. Chassis Ass'y (A02)

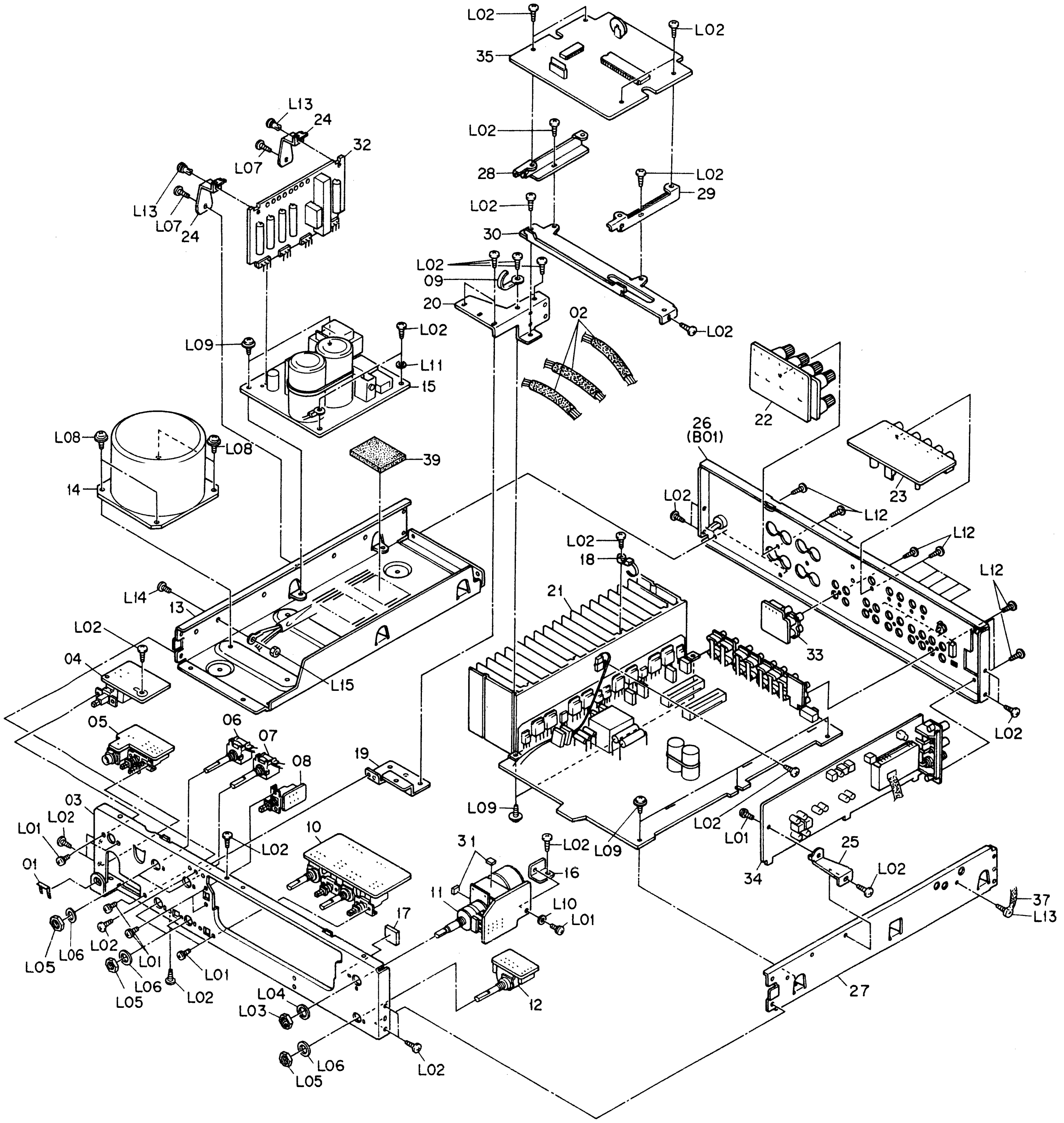

L02
L02
35
L13
24
32
L07
L02
28
L02
29
L13
L07
24
L02
30
L02
09
20
02
L02
L09
L02
L11
15
22
L08
L08
39
26
(B01)
14
23
L02
L12
L12
L02
18
21
L14
13
L12
L02
04
L15
33
05
06
07
08
19
L02
03
L02
L01
L09
L02
L09
10
L01
L02
31
L02
16
25
01
11
L10
L01
34
L02
37
L13
17
L02
L06
L05
L01
L02
L01
L06
L05
L02
L04
L03
12
27
L06
L05
L02

Fig. 2.3

### 2.4. Rear Panel Ass'y (B01)

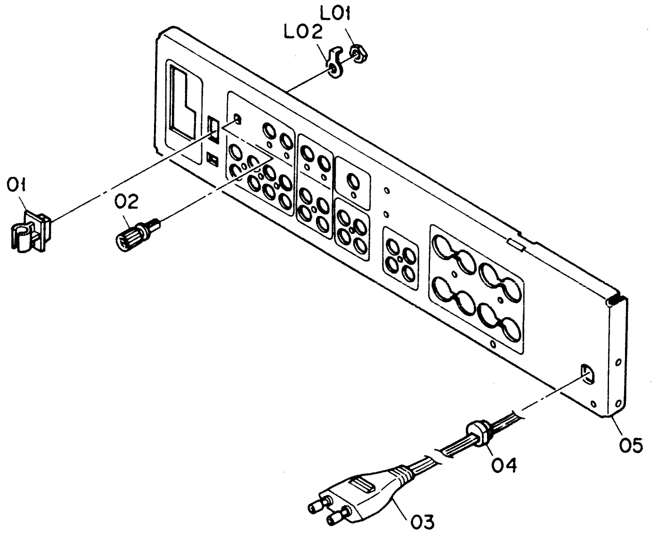


Fig. 2.4

| Schematic Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|
| **A02** | **JA04289A** | **Chassis Ass'y (SR-4E (Germany))**<br>Serial No.: D10601001 - | 1 |
| 01 | 0J05092A | Snap Plate | 1 |
| 02 | 0B80126A | Glass Fiber Tube | 3 |
| 03 | 0J05339A | Front Chassis | 1 |
| 04 | BA06845A | Power Switch P.C.B. Ass'y | 1 |
| 05 | BA06600A | Speaker Switch P.C.B. Ass'y | 1 |
| 06 | 0B70101A | Rotary Switch 370mm | 1 |
| 07 | 0B70102A | Rotary Switch 340mm | 1 |
| 08 | BA06608A | MM/MC Switch P.C.B. Ass'y | 1 |
| 09 | 0E03145A | Coating Clip CS-9 | 1 |
| 10 | BA06598A | Tone Control P.C.B. Ass'y | 1 |
| 11 | BA06597A | Volume Motor P.C.B. Ass'y | 1 |
| 12 | BA06604A | Loudness Volume P.C.B. Ass'y | 1 |
| 13 | 0J05325B | Power Supply Chassis | 1 |
| 14 | 0B50088A | Power Transformer | 1 |
| 15 | BA06599A | Power Supply P.C.B. Ass'y | 1 |
| 16 | 0J05331A | Motor Holder | 1 |
| 17 | 0J05307A | BS Damper 1R | 1 |
| 18 | 0B90210A | Insu-Lock T30MR-HS | 1 |
| 19 | 0J05323B | Heat Sink Holder B | 1 |
| 20 | 0J05334A | Heat Sink Holder A | 1 |
| 21 | BA06849A | Main P.C.B. Ass'y | 1 |
| 22 | BA06843A | Speaker Terminal P.C.B. Ass'y | 1 |
| 23 | BA06842A | Video Amp. P.C.B. Ass'y | 1 |
| 24 | 0J05321A | Fuse P.C.B. Holder | 2 |
| 25 | 0J05322A | Tuner P.C.B. Holder | 1 |
| 26 | HA05268A | Rear Panel Ass'y (SR-4E (Germany)) | 1 |
| 27 | 0J05202C | Side Chassis | 1 |
| 28 | 0J05332A | Logic P.C.B. Holder L | 1 |
| 29 | 0J05333A | Logic P.C.B. Holder R | 1 |
| 30 | 0J05340B | P.C.B. Holder | 1 |
| 31 | 0J05366A | Volume Damper | 2 |
| 32 | BA06848A | Fuse P.C.B. Ass'y | 1 |
| 33 | BA06844A | Pin Jack P.C.B. Ass'y | 1 |
| 34 | BA06846A | Tuner P.C.B. Ass'y | 1 |
| 35 | BA06610A | Logic P.C.B. Ass'y | 1 |
| 36 | 0J05380A | P.C.B. Cushion | 1 |
| 37 | 0B81738A | GND Wire | 1 |
| L01 | 0E00612A | M3x6 ⊕Pan (2A) | 9 |
| L02 | 0E00868A | BT3x8 ⊕Binding | 26 |
| L03 | — | Nut Hex. M9 | (1) |
| L04 | — | Washer | (1) |
| L05 | — | Nut Hex. M7 | (5) |
| L06 | — | Washer | (5) |
| L07 | 0E00857A | BT3x6 ⊕Binding | 2 |
| L08 | 0E03032A | BT4x8 ⊕Pan Washer-faced (Black Chromate) | 4 |
| L09 | 0E03157A | BT3x8 ⊕Binding with Washer | 7 |
| L10 | 0E03409A | Washer 3.2x5.7x1.2 (Copper) | 1 |
| L11 | 0J05294A | Washer 3.1x8x1 (Copper) | 1 |
| L12 | 0E00921A | BT3x8 ⊕Binding (Black Chromate) | 17 |
| L13 | 0J05284A | Plastic Rivet 3x4.5 | 2 |
| L14 | 0E00506A | Nut Hex. M4 | 1 |
| L15 | 0E00929A | M4x8 ⊕Binding | 1 |
| L16 | 0E03321A | ST3x6 ⊕Binding | 1 |
| — | 0J05373B | Diode Barrier | 1 |
| — | 0M04956A | Lithium Battery Caution Label | 1 |
| — | 0M03700A | Earth Mark Label | 1 |
| **B01** | **HA05268A** | **Rear Panel Ass'y (SR-4E (Germany))**<br>Serial No.: D10601001 - | 1 |
| 01 | 0B90071A | AM Loop Antenna Holder | 1 |
| 02 | 0B81604A | Ground Terminal T-5435 | 1 |
| 03 | 0B90270A | Power Cord | 1 |
| 04 | 0B08325A | Cord Bushing SR-6W-1 | 1 |
| 05 | 0H05087A | Rear Panel | 1 |
| L01 | — | Nut Ground Terminal | (1) |
| L02 | — | Earth Lug (Ground Terminal) | (1) |

## 3. MOUNTING DIAGRAMS AND PARTS LIST

Notes:
1. Mounting diagram shows a dip side view of the printed circuit board.
2. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
3. Following transistors are interchangeable with each other.
   - a. 2SA733, 2SA608SP, 2SA1048, 2SA1175
   - b. 2SC945, 2SC536SP, 2SC2458, 2SC2785
4. Abbreviation for part name:
   TR — Transistor, SiD — Silicon Diode, ZD — Zener Diode, Varicap — Variable Capacitance Diode
   RK — Carbon Resistor, RM — Metal Film Resistor, RF — Fail Safe Type Resistor, RW — Wire Wound Resistor
   CE — Electrolytic Capacitor, CM — Mylar Capacitor, CC — Ceramic Capacitor, CP — PP Capacitor
   CMM — Metalized Mylar Capacitor, CSP — Polystyrene Capacitor, C — Mica Capacitor

### 3.1. Power Switch P.C.B. Ass'y

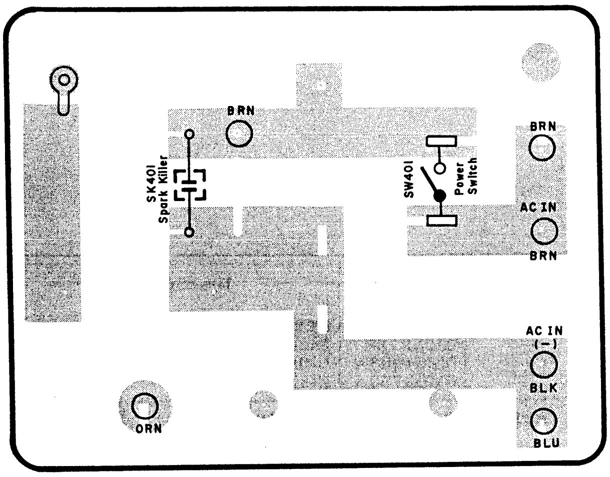

BRN
SK401
Spark Killer
SW401
Power Switch
BRN
AC IN
BRN
AC IN
(−)
BLK
ORN
BLU

Fig. 3.1

### 3.2. Pin Jack P.C.B. Ass'y

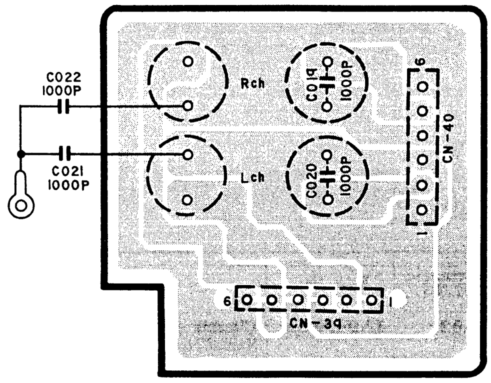

C022
1000P
C021
1000P
Rch
Lch
C019
1000P
C020
1000P
CN-40
6
1
6
1
CN-39

Fig. 3.2

### 3.3. Power Indicator P.C.B. Ass'y

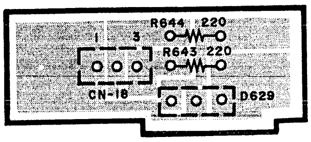

R644 220
1
3
R643 220
CN-18
D629

Fig. 3.3

### 3.4. MM/MC Switch P.C.B. Ass'y

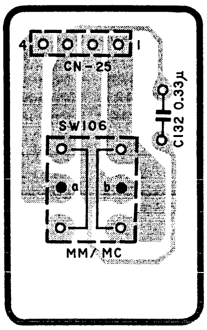

4
1
CN-25
C132 0.33μ
SW106
a
b
MM/MC

Fig. 3.4

### 3.5. Speaker Switch P.C.B. Ass'y

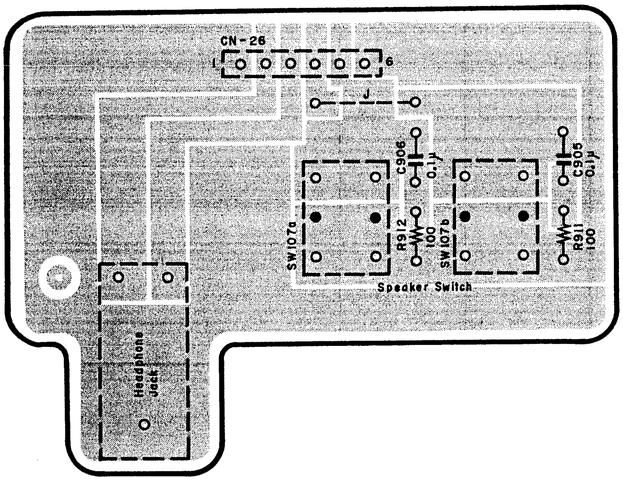

CN-26
1
6
J
C906
0.1μ
C905
0.1μ
SW107a
R912
100
SW107b
R911
100
Speaker Switch
Headphone Jack

Fig. 3.5

### 3.6. Loudness Volume P.C.B. Ass'y

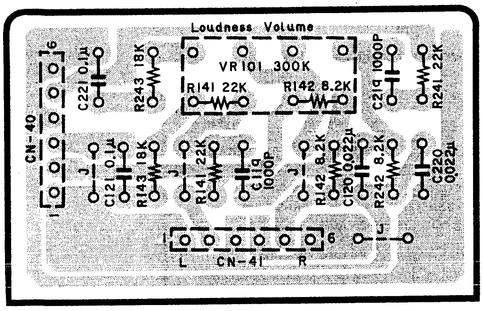

Loudness Volume
VR101 300K
R141 22K
R142 8.2K
C221 0.1μ
R243 18K
C219 1000P
R241 22K
CN-40
6
1
J
C121 0.1μ
R143 18K
R141 22K
C119 1000P
R142 8.2K
C120 0.022μ
R242 8.2K
C220 0.022μ
CN-41
L
R

Fig. 3.6

### 3.7. Volume Motor P.C.B. Ass'y

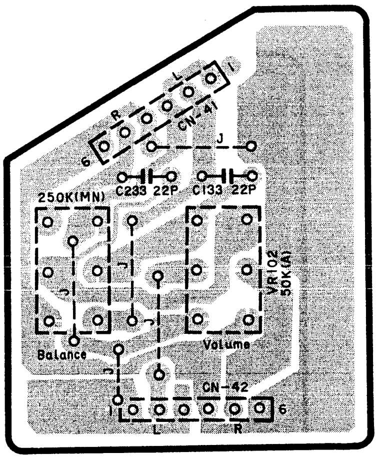

L
1
R
CN-41
6
J
C233 22P
C133 22P
250K(MN)
VR102 50K(A)
Balance
Volume
CN-42
L
R

Fig. 3.7

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06845A | Power Switch P.C.B. Ass'y |
| | 0B60443A | Power Switch P.C.B. |
| SW401 | 0B71006A | Power Switch SDL1P |
| SK401 | 0B90264A | Spark Killer XE-333 |
| | 0B82994A | PD Connector V430 BRN (2) |
| | 0B82995A | PD Connector V430 BLK (1) |
| | 0E00752A | Eyelet 2x3 (2) |
| | BA06844A | Pin Jack P.C.B. Ass'y |
| | 0B60435D | Pin Jack P.C.B. |
| C019,020<br>021,022 | 0B41007A | CC 1000P 25V |
| CN39,40 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B81710A | 4P Pin Jack WH6D-1 (1) |
| | 0B83133A | GND Wire (1) |
| | BA06645A | Power Indicator P.C.B. Ass'y |
| | 0B60449A | Power Indicator P.C.B. |
| D629 | 0B12421A | LED SRP-56PDWF (GRN/RED) |
| R643,644 | 0B09661A | RK 220 1/6W J |
| CN18 | 0B82958A | 3P Connector RED |
| | BA06608A | MM/MC Switch P.C.B. Ass'y |
| | 0B60436D | MM/MC Switch P.C.B. |
| C132 | 0B41304A | CMM 0.33μ 50V J |
| SW106 | 0B70105A | Push Switch SPUN12 6.5mm |
| CN25 | 0B82965A | 4P Connector WHT |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06600A | Speaker Switch P.C.B. Ass'y |
| | 0B60444A | Speaker Switch P.C.B. |
| R911,912 | 0B09653A | RK 100 1/6W J |
| C905,906 | 0B41298A | CMM 0.1μ 50V J |
| SW107 | 0B70098A | Push Switch SPUN22 |
| CN26 | 0B82966A | 6P Connector WHT |
| | 0B81478A | Headphone Jack (1) |
| | BA06604A | Loudness Volume P.C.B. Ass'y |
| | 0B60433D | Loudness Volume P.C.B. |
| VR101 | 0B30075A | VR 300K (B)x2 |
| R141,241 | 0B09709A | RK 22K 1/6W J |
| R142,242 | 0B09699A | RK 8.2K 1/6W J |
| R143,243 | 0B09707A | RK 18K 1/6W J |
| C119,219 | 0B41791A | CSP 1000P 50V J |
| C120,220 | 0B41290A | CM 0.022μ 50V J |
| C121,221 | 0B41298A | CMM 0.1μ 50V J |
| CN40,41 | 0B81013A | Dip Mate 6P WH6D-1 |
| | 0B82969A | Ribbon Cable 6P 170mm (1) |
| | 0B82970A | Ribbon Cable 6P 550mm (1) |
| | BA06597A | Volume Motor P.C.B. Ass'y |
| | 0B60434D | Volume Motor P.C.B. |
| VR102 | 0B30074A | Volume Motor Ass'y |
| C133,233 | 0B41702A | CSP 22P 50V J |
| C630 | 0B41617A | CC 0.1μ 25V Z |
| CN19 | 0B82959A | 2P Connector RED |
| CN41,42 | 0B81013A | Dip Mate 6P WH6D-1 |

### 3.8. Speaker Terminal P.C.B. Ass'y

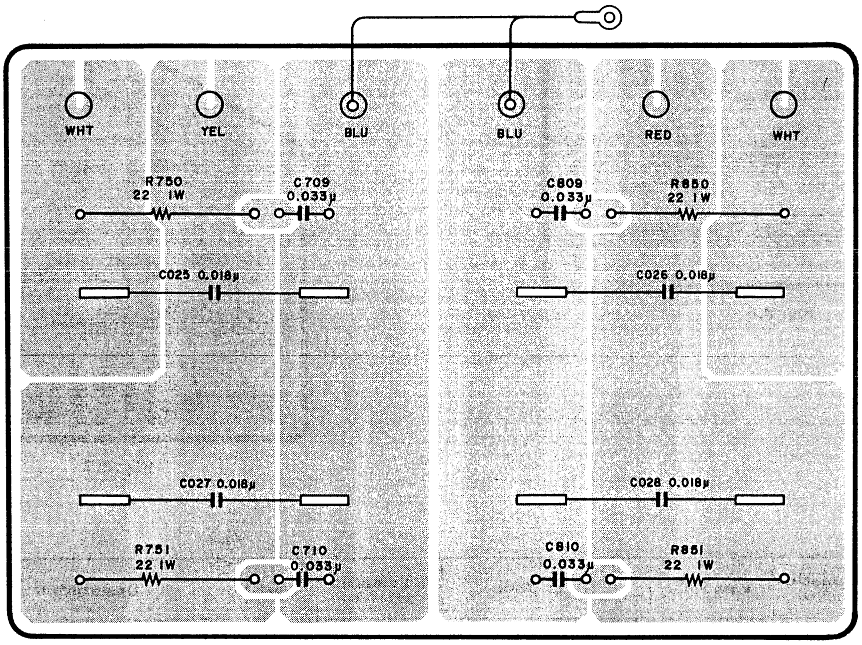

WHT
YEL
BLU
BLU
RED
WHT
R750 22 1W
C709 0.033μ
C809 0.033μ
R850 22 1W
C025 0.018μ
C026 0.018μ
C027 0.018μ
C028 0.018μ
R751 22 1W
C710 0.033μ
C810 0.033μ
R851 22 1W

Fig. 3.8

### 3.9. Tone Control P.C.B. Ass'y

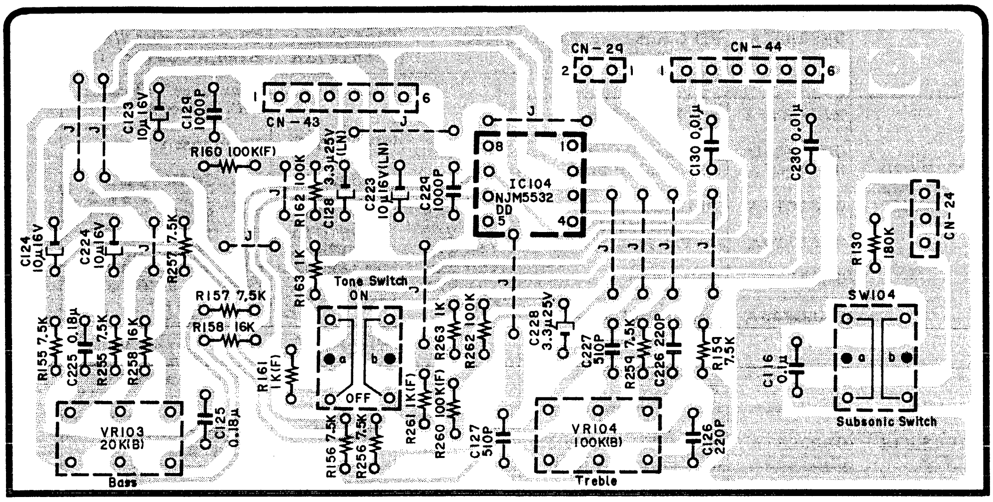

CN-29
2
1
CN-44
1
6
CN-43
C123 10μ16V
C129 1000P
R160 100K(F)
R162 100K
C128 3.3μ25V (LN)
C223 10μ16V(LN)
C229 1000P
IC104 NJM5532 DD
8
1
5
4
C130 0.01μ
C230 0.01μ
CN-24
R130 180K
C124 10μ16V
C224 10μ16V
R257 7.5K
R157 7.5K
R158 16K
R163 1K
Tone Switch ON
OFF
a
b
R155 7.5K
C225 0.18μ
R255 7.5K
R258 16K
R161 1K(F)
R263 1K
R262 100K
C228 3.3μ25V
C227 510P
R259 7.5K
C226 220P
R159 7.5K
C116 0.1μ
SW104
a
b
Subsonic Switch
VR103 20K(B)
Bass
C125 0.18μ
R156 7.5K
R256 7.5K
R261 1K(F)
R260 100K(F)
C127 510P
VR104 100K(B)
Treble
C126 220P
J

Fig. 3.9

| Schematic Ref. No. | Part No. | Description | Schematic Ref. No. | Part No. | Description | Schematic Ref. No. | Part No. | Description |
|---|---|---|---|---|---|---|---|---|
| | **BA06843A** | **Speaker Terminal P.C.B Ass'y** | | **BA06598A** | **Tone Control P.C.B. Ass'y** | C125,225 | 0B41301A | CMM 0.18μ 50V J |
| | 0B60446A | Speaker Terminal P.C.B. | | 0B60432D | Tone Control P.C.B. | C126,226 | 0B41788A | CSP 220P 50V J |
| R750,751<br>850,851 | 0B24140A | RF 22 1W | IC104 | 0B11204A | IC NJM5532DD | C127,227 | 0B41789A | CSP 510P 50V J |
| C025,026<br>027,028 | 0B41289A | CM 0.018μ 50V J | VR103 | 0B30073A | VR 20K (B)x2 | C128,228 | 0B40460A | CE 3.3μ 50V (LN) |
| C709,710<br>809,810 | 0B41292A | CMM 0.033μ 50V J | VR104 | 0B30062A | VR 100K (B)x2 | C129,229 | 0B41791A | CSP 1000P 50V J |
| | 0B81595B | Speaker Terminal 8P (1) | R130 | 0B09731A | RK 180K 1/6W J | C130,230 | 0B41286A | CM 0.01μ 50V J |
| | 0B83056B | GND Wire (1) | R155,156<br>157,159<br>255,256<br>257,259 | 0B09698A | RK 7.5K 1/6W J | CN24 | 0B82964A | 3P Connector RED |
| | | | R158,258 | 0B09706A | RK 16K 1/6W J | CN29 | 0B83004A | 2P Connector RED |
| | | | R160,260 | 0B25387A | RM 100K 1/6W F | CN43,44 | 0B81013A | Dip Mate 6P WH6D-1 |
| | | | R161,261 | 0B25195A | RM 1.00K 1/6W F | | 0B82972A | Ribbon Cable 6P 410mm (1) |
| | | | R162,262 | 0B09725A | RK 100K 1/6W J | | 0B82973A | Ribbon Cable 6P 310mm (1) |
| | | | R163,263 | 0B09677A | RK 1K 1/6W J | | | |
| | | | SW103,104 | 0B70074A | Push Switch 1Key | | | |
| | | | C116 | 0B41298A | CMM 0.1μ 50V J | | | |
| | | | C123,124<br>223,224 | 0B09816A | CE 10μ 16V (LN) | | | |

### 3.10. Fuse P.C.B. Ass'y

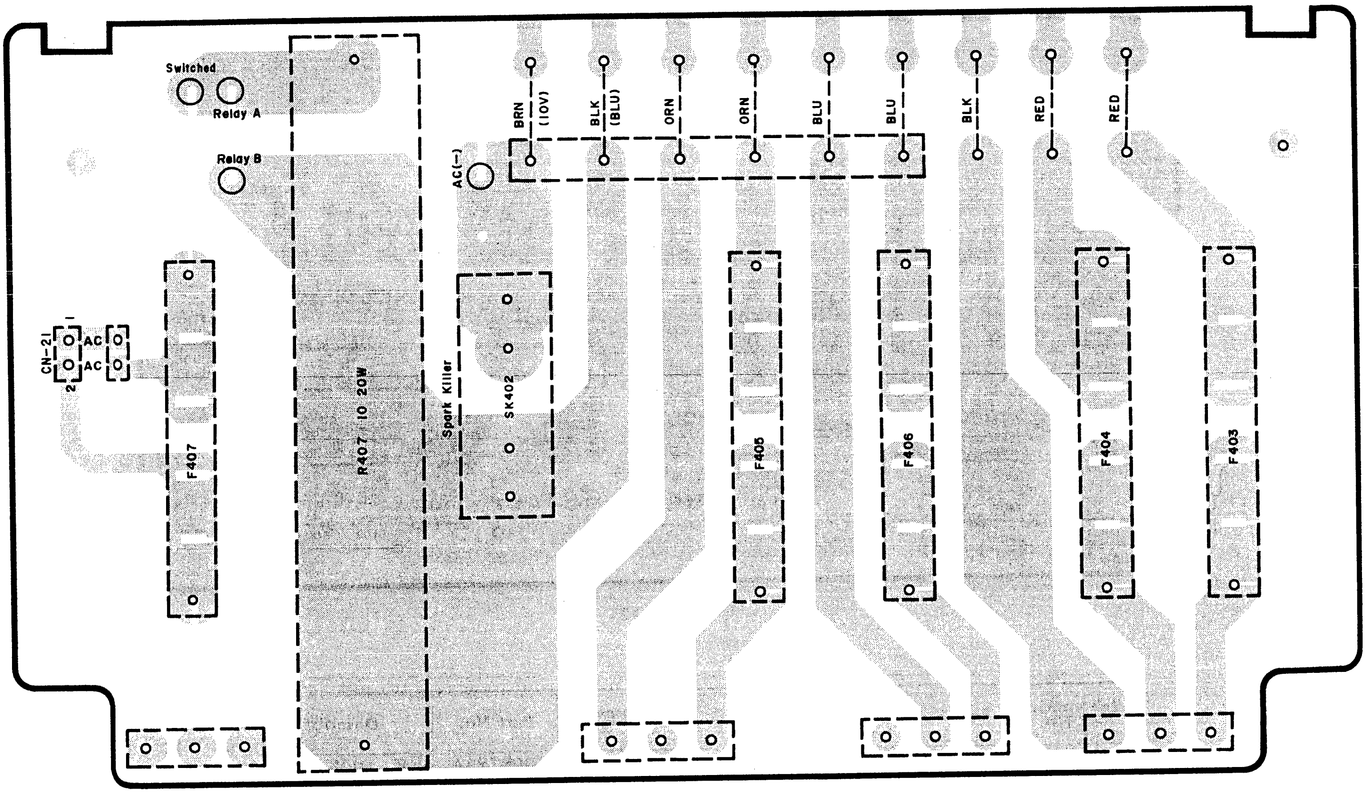

Switched
Relay A
Relay B
CN-21
1
2
AC
AC
F407
R407 10 20W
Spark Killer
SK402
AC(−)
BRN (0V)
BLK (BLU)
ORN
ORN
BLU
BLU
BLK
RED
RED
F405
F406
F404
F403

Fig. 3.10

| Schematic Ref. No. | Part No. | Description | Schematic Ref. No. | Part No. | Description |
|---|---|---|---|---|---|
| | BA06848A | **Fuse P.C.B. Ass'y** | | 0M04194A | Fuse Label T315mA (1) |
| | 0B60447A | Fuse P.C.B. | | 0M04391A | Fuse Label T1.25A (1) |
| R407 | 0B24145A | RC 10 2W | | 0M04443A | Fuse Label T3.15Ax2 (1) |
| SK402 | 0B90264A | Spark Killer | | | |
| F403,404 | 0B08281A | Fuse T3.15A 250V | | | |
| F405 | 0B02240A | Fuse T1.25A 250V | | | |
| F406 | 0B08263U | Fuse T315mA 250V | | | |
| F407 | 0B08252A | Fuse T250mA 250V | | | |
| CN21 | 0B82961A | 2P Connector WHT | | | |
| | 0B81634A | 2P-T Post (1) | | | |
| | 0B81740A | 6P Terminal (1) | | | |
| | 0B81709A | 3P-T Post L Angle (4) | | | |
| | 0B08349B | Fuse Clip (10) | | | |
| | 0M04137A | Fuse Label T250mA (1) | | | |

### 3.11. Video Amp. P.C.B. Ass'y

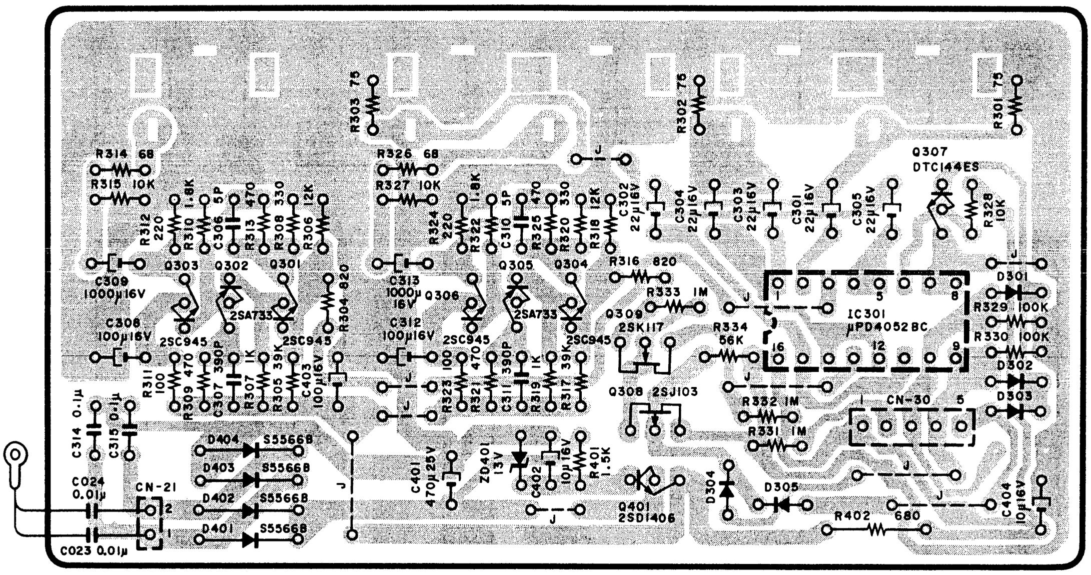

R303 75
R302 75
R301 75
R314 68
R315 10K
R326 68
R327 10K
R312 220
R310 1.8K
C306 5P
R313 470
R308 330
R306 12K
R324 220
R322 1.8K
C310 5P
R325 470
R320 330
R318 12K
C302 22μ16V
C304 22μ16V
C303 22μ16V
C301 22μ16V
C305 22μ16V
Q307
DTC144ES
R328 10K
C309 1000μ16V
Q303
Q302
Q301
R304 820
C313 1000μ 16V
Q305
Q304
R316 820
R333 1M
J
C308 100μ16V
2SC945
2SA733
2SC945
Q306
C312 100μ16V
2SC945
2SA733
2SC945
Q309
2SK117
R334 56K
IC301
μPD4052BC
1
5
8
16
12
9
D301
R329 100K
R330 100K
D302
D303
R311 100
R309 470
C307 390P
R307 1K
R305 39K
C403 100μ16V
R323 100
R321 470
C311 390P
R319 1K
R317 39K
Q308 2SJ103
R332 1M
R331 1M
CN-30
C314 0.1μ
C315 0.1μ
D404 S5566B
D403 S5566B
D402 S5566B
D401 S5566B
C024 0.01μ
CN-21
2
1
C023 0.01μ
C401 470μ25V
ZD401 13V
C402 10μ16V
R401 1.5K
Q401 2SD1406
D304
D305
R402 680
C404 10μ16V

Fig. 3.11

| Schematic Ref. No. | Part No. | Description | Schematic Ref. No. | Part No. | Description |
|---|---|---|---|---|---|
|  | BA06842A | **Video Amp. P.C.B. Ass'y** | R329,330 | 0B09725A | RK 100K 1/6W J |
|  |  |  | R331,332 333 | 0B09749A | RK 1M 1/6W J |
|  | 0B60389E | Video Amp. P.C.B. | R334 | 0B09719A | RK 56K 1/6W J |
| IC301 | 0B11247A | IC μPD4052BC | R401 | 0B09681A | RK 1.5K 1/6W J |
| Q301,303 304,306 | 0B01872A | TR 2SC945L (P,Q) | R402 | 0B05794A | RK 680 1/4W J |
|  |  |  | C023,024 | 0B41286A | CM 0.01μ 50V J |
| Q302,305 | 0B06013A | TR 2SA733 (P,Q) | C301,302 303,304 305 | 0B01862A | CE 22μ 16V |
| Q307 | 0B10062A | TR DTC144ES |  |  |  |
| Q308 | 0B10211A | FET 2SJ103 |  |  |  |
| Q309 | 0B06129A | FET 2SK117 (Y) | C306,310 | 0B09276A | CC 5P 50V |
| Q401 | 0B06452A | TR 2SD1406 (Y) | C307,311 | 0B41002A | CP 390P 100V J |
| D301-305 | 0B06398A | SiD 1SS176 (5) | C308,312 403 | 0B01400A | CE 100μ 16V |
| D401-404 | 0B12362A | SiD S5566B (4) |  |  |  |
| ZD401 | 0B12317A | ZD 13V MTZ13B | C309,313 | 0B40082A | CE 1000μ 16V |
| R301,302 303 | 0B09650A | RK 75 1/6W J | C314,315 | 0B41298A | CMM 0.1μ 50V J |
|  |  |  | C401 | 0B40094A | CE 470μ 25V |
| R304,316 | 0B09675A | RK 820 1/6W J | C402,404 | 0B01412A | CE 10μ 16V |
| R305,317 | 0B09715A | RK 39K 1/6W J | CN21 | 0B81223A | 2P-T Post WHT |
| R306,318 | 0B09703A | RK 12K 1/6W J | CN30 | 0B81235A | 5P-T Post WHT |
| R307,319 | 0B09677A | RK 1K 1/6W J |  | 0B81592B | Pin Jack 1P (5) |
| R308,320 | 0B09665A | RK 330 1/6W J |  | 0B83133A | GND Wire 80 (1) |
| R309,313 321,325 | 0B09669A | RK 470 1/6W J |  |  |  |
| R310,322 | 0B09683A | RK 1.8K 1/6W J |  |  |  |
| R311,323 | 0B09653A | RK 100 1/6W J |  |  |  |
| R312,324 | 0B09661A | RK 220 1/6W J |  |  |  |
| R314,326 | 0B09649A | RK 68 1/6W J |  |  |  |
| R315,327 328 | 0B09701A | RK 10K 1/6W J |  |  |  |

### 3.13. Power Supply P.C.B. Ass'y

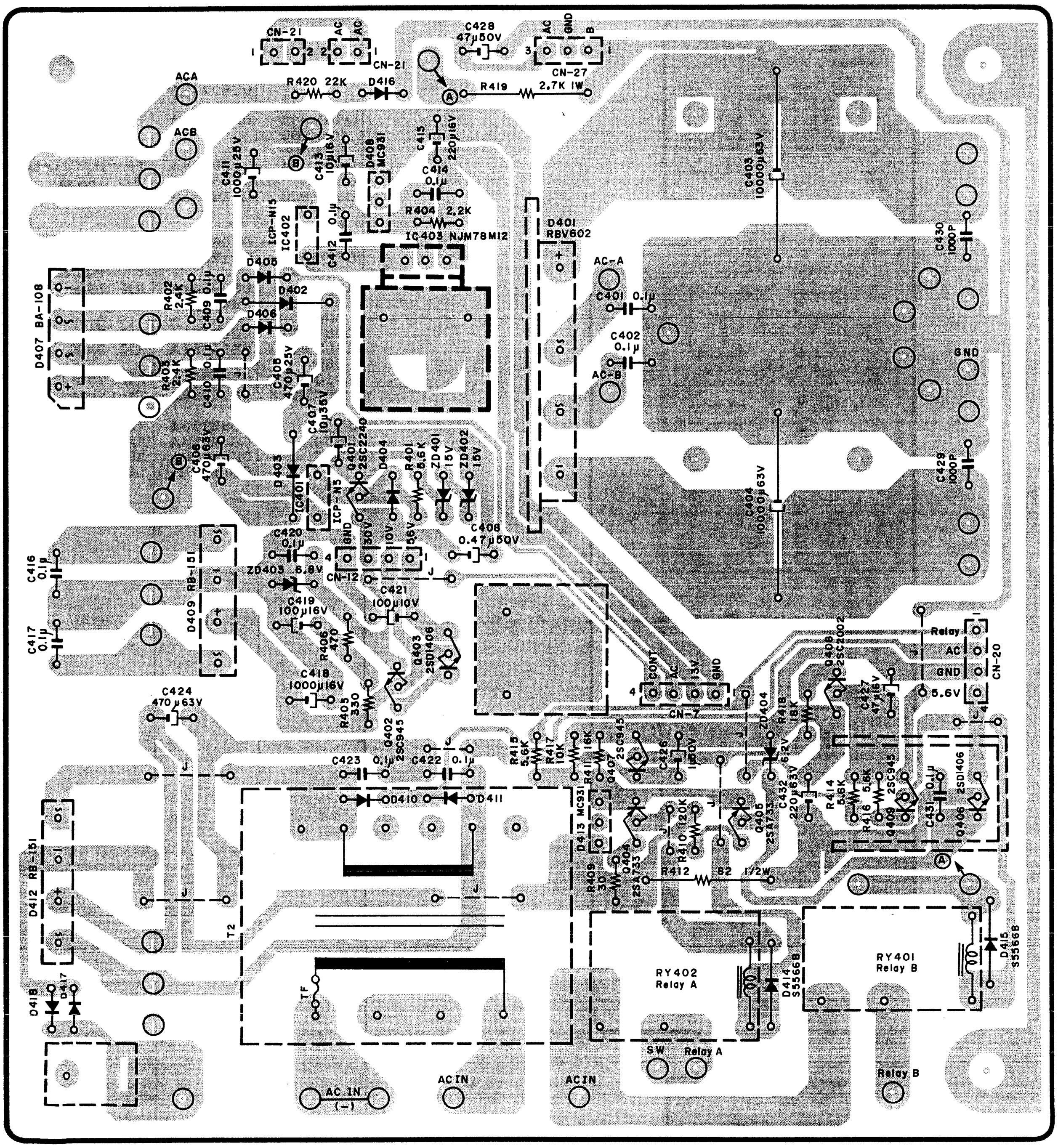

CN-21
CN-27
C428 47μ50V
R420 22K
D416
R419 2.7K 1W
ACA
ACB
C411 1000μ25V
C413 10μ16V
D408 MC931
C415 220μ16V
C414 0.1μ
R404 2.2K
IC402 ICP-N15
C412 0.1μ
IC403 NJM78M12
D401 RBV602
C403 10000μ63V
C430 1000P
AC-A
C401 0.1μ
C402 0.1μ
AC-B
GND
D405
D402
D406
D407 BA-108
R402 2.4K
C409 0.1μ
R403 2.4K
C410 0.1μ
C405 470μ25V
C407 10μ35V
Q401 2SC2240
D404
R401 5.6K
ZD401 15V
ZD402 15V
C406 470μ63V
D403
IC401 ICP-N5
C429 1000P
C404 10000μ63V
C420 0.1μ
C408 0.47μ50V
CN-12
GND 30V 10V 5.6V
C416 0.1μ
C417 0.1μ
ZD403 6.8V
D409 RB-151
C419 100μ16V
C421 100μ10V
R406 470
Q403 2SD1406
C418 1000μ16V
R405 330
Q402 2SC945
C424 470μ63V
CN-7
CONT 12V 13V GND
Q408 2SC2002
Relay AC GND 5.6V
CN-20
C427 47μ16V
ZD404 62V
R418 8K
C423 0.1μ
C422 0.1μ
R415 5.6K
R417 10K
R411 18K
Q407 2SC945
C426 1μ50V
C432 220μ63V
R414 5.6K
R416 5.6K
Q409 2SC945
C431 0.1μ
Q406 2SD1406
D410
D411
D413 MC931
R410 120K
Q405 2SA733
Q404 2SA733
R409 30
R412 82 1/2W
D412 RB-151
T2
TF
D418
D417
RY402 Relay A
D414 S5566B
RY401 Relay B
D415 S5566B
SW
Relay A
Relay B
AC IN (−)
AC IN
AC IN

Fig. 3.13

### 3.12. Control Switch P.C.B. Ass'y

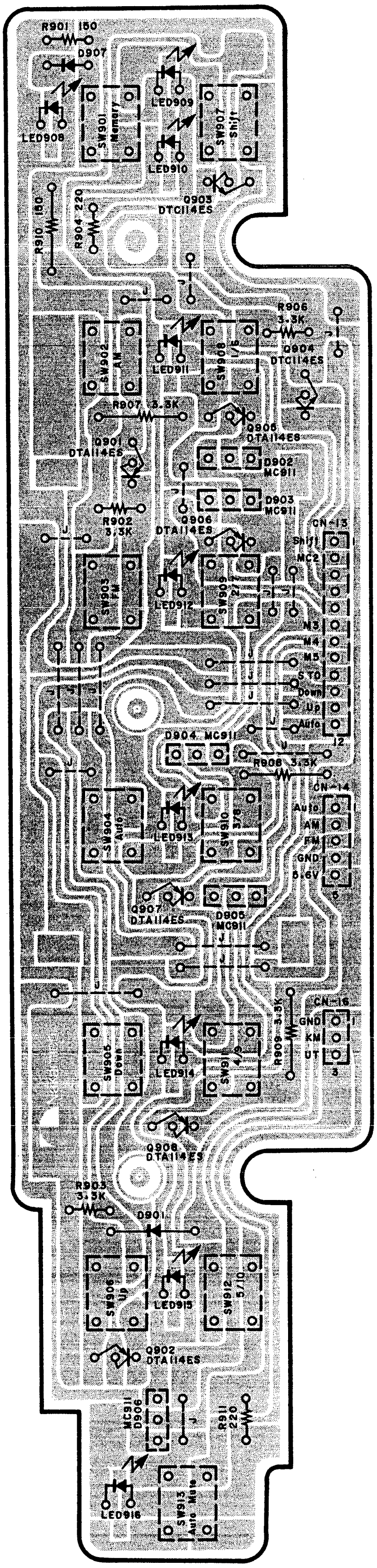

R901 150
D907
LED908
SW901 Memory
LED909
LED910
SW907 Shift
Q903 DTC114ES
R910 150
R904 220
J
R906 3.3K
Q904 DTC114ES
SW902 AM
LED911
SW908 1/6
R907 3.3K
Q905 DTA114ES
Q901 DTA114ES
D902 MC911
D903 MC911
R902 3.3K
Q906 DTA114ES
CN-13
Shift
MC2
SW903 FM
LED912
SW909 2/7
M3
M4
M5
STO
Down
Up
Auto
12
D904 MC911
R908 3.3K
CN-14
Auto
AM
FM
GND
5.6V
5
SW904 Auto
LED913
SW910 3/8
Q907 DTA114ES
D905 MC911
CN-16
GND
KM
UT
3
R909 3.3K
SW905 Down
LED914
SW911 4/9
Q908 DTA114ES
R903 3.3K
D901
SW906 Up
LED915
SW912 5/10
Q902 DTA114ES
MC911 D906
R911 220
LED916
SW913 Auto Mute

Fig. 3.12

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06593A | Control Switch P.C.B. Ass'y |
| | 0B60442A | Control Switch P.C.B. |
| Q901,902<br>905,906<br>907,908 | 0B10058A | TR DTA114ES |
| Q903,904 | 0B10068A | TR DTC114ES |
| D901 | 0B06181A | SiD 1SS53 |
| D902,903<br>904,905<br>906 | 0B12391A | SiD MC911 |
| D907 | 0B06398A | SiD 1SS176 |
| LED908-916 | 0B12395A | LED SLR-34PC3F P-Green (9) |
| R901 | 0B09657A | RK 150 1/6W J |
| R902,903<br>906 | 0B09689A | RK 3.3K 1/6W J |
| R904,911 | 0B09661A | RK 220 1/6W J |
| R907,908<br>909 | 0B01681A | RK 3.3K 1/4W J |
| R910 | 0B05795A | RK 150 1/4W J |
| SW901-913 | 0B70062A | Tact Switch KHH10910 (13) |
| CN13 | 0B82953A | 12P Connector WHT |
| CN14 | 0B82954A | 5P Connector WHT |
| CN16 | 0B82956A | 3P Connector YEL |
| | 0J05209B | LED Reflector (9) |

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | BA06599A | Power Supply P.C.B. Ass'y |
| | 0B60440A | Power Supply P.C.B. |
| IC401 | 0B11248A | IC ICP-N5-T104 |
| IC402 | 0B11335A | IC ICP-N15-T104 |
| Q401 | 0B10078A | TR 2SC2240 (GR) |
| Q402,407 409 | 0B01872A | TR 2SC945L (P,Q) |
| Q404,405 | 0B06013A | TR 2SA733 (P,Q) |
| Q408 | 0B06322A | TR 2SC2002 (K,L) |
| D402,403 414,415 | 0B12362A | SiD S5566B |
| D404,405 406,410 411,416 417,418 | 0B06398A | SiD 1SS176 |
| D407 | 0B06282A | SiD DBA10B.C. |
| D408,413 | 0B12420A | SiD MC931 |
| D409,412 | 0B06183A | SiD RB-151 |
| ZD401,402 | 0B12464A | ZD 15V UTZJ15C |
| ZD403 | 0B12440A | ZD 6.8V UTZJ6.8C |
| ZD404 | 0B12437A | ZD 6.2V UTZJ6.2C |
| RY401 | 0B90250A | Relay 24V G6C-1117P |
| RY402 | 0B90249A | Relay 12V G6C-1117P |
| T2 | 0B50090A | Power Transformer |
| R401,414 415,416 | 0B09695A | RK 5.6K 1/6W J |
| R402,403 | 0B09686A | RK 2.4K 1/6W J |
| R404 | 0B09685A | RK 2.2K 1/6W J |
| R405 | 0B09665A | RK 330 1/6W J |
| R406 | 0B09669A | RK 470 1/6W J |
| R409 | 0B09640A | RK 30 1/6W J |
| R410 | 0B09655A | RK 120 1/6W J |
| R411 | 0B09706A | RK 16K 1/6W J |
| R412 | 0B09253A | RF 82 1/2W J |
| R417 | 0B09701A | RK 10K 1/6W J |
| R418 | 0B09707A | RK 18K 1/6W J |
| R419 | 0B24061A | RF 2.7K 1W J |
| R420 | 0B09709A | RK 22K 1/6W J |
| C401,402 409,410 412,414 416,417 420,422 423,431 | 0B41298A | CMM 0.1μ 50V J |
| C403,404 | 0B40454A | CE 10000μ 63V |
| C405 | 0B40094A | CE 470μ 25V |
| C406,424 | 0B40134A | CE 470μ 63V |
| C407 | 0B40100A | CE 10μ 35V |
| C408 | 0B40462A | CE 0.47μ 50V |
| C411 | 0B40095A | CE 1000μ 25V |
| C413,426 | 0B01412A | CE 10μ 16V |
| C415 | 0B40079A | CE 220μ 16V |
| C418 | 0B40082A | CE 1000μ 16V |
| C419 | 0B40078A | CE 100μ 16V |
| C421 | 0B40464A | CE 100μ 10V |
| C427 | 0B40077A | CE 47μ 16V |
| C428 | 0B40115A | CE 4.7μ 50V |
| C429,430 | 0B41791A | CSP 1000P 50V J |
| C432 | 0B40132A | CE 220μ 63V |
| CN7 | 0B82947A | 4P Connector WHT |
| CN12 | 0B82952A | 4P Connector WHT |
| CN20 | 0B82960A | 4P Connector RED |
| CN27 | 0B82967A | 3P Connector RED |
| | 0B82983A | PD Connector V340 RED (1) |
| | 0B82984A | PD Connector V340 WHT (1) |
| | 0B82985A | PD Connector V290 RED (1) |
| | 0B82986A | PD Connector V290 WHT (1) |
| | 0B82987A | PD Connector V330 BLU (1) |
| | 0B82988A | PD Connector V300 BLU (2) |
| | 0B82990A | PD Connector V260 YEL (1) |
| | 0B82991A | PD Connector V150 RED (2) |
| | 0B82992A | PD Connector V150 WHT (1) |
| | 0B82993A | PD Connector V100 BLU (1) |
| | 0B82996A | PD Connector V150 BLK (2) |
| | 0B82997B | PD Connector V150 RED (1) |
| | 0B82998A | PD Connector V150 ORN (1) |
| | 0B82999B | PD Connector V150 YEL (2) |
| | 0B83003A | PD Connector V230 BLU (2) |
| | 0B83000A | GND Cable V070 BLU (1) |
| | 0B90019A | Insu-Lock SKB80 (7) |
| | 0B90206A | Insu-Lock SKB4M (1) |
| | 0E03355A | Earth Lug MET31-0113 (1) |
| | 0J05309A | BS Damper 1VR (1) |
| | 0J05362A | Earth Plate (1) |
| IC403 | 0B11252A | IC 78M12 |
| | 0E00612A | M3x6 ⊕Pan (2A) (1) |
| | 0J05351A | TR Heat Sink (1) |
| Q403 | 0B06452A | TR 2SD1406 (Y) |
| | 0E00612A | M3x6 ⊕Pan (2A) (1) |
| | 0J05351A | TR Heat Sink (1) |
| Q406 | 0B06452A | TR 2SD1406 (Y) |
| | 0B08680B | Heat Sink A (1) |
| | 0E00972A | Nut Hex. M3 (1) |
| | 0E03319A | M3x8 ⊕Binding (1) |
| D401 | 0B12388A | SiD RBV-602 |
| | 0E03030A | M3x6 ⊕Binding (1) |
| | 0J05335B | SiD Heat Sink (1) |

### 3.14. Logic P.C.B. Ass'y

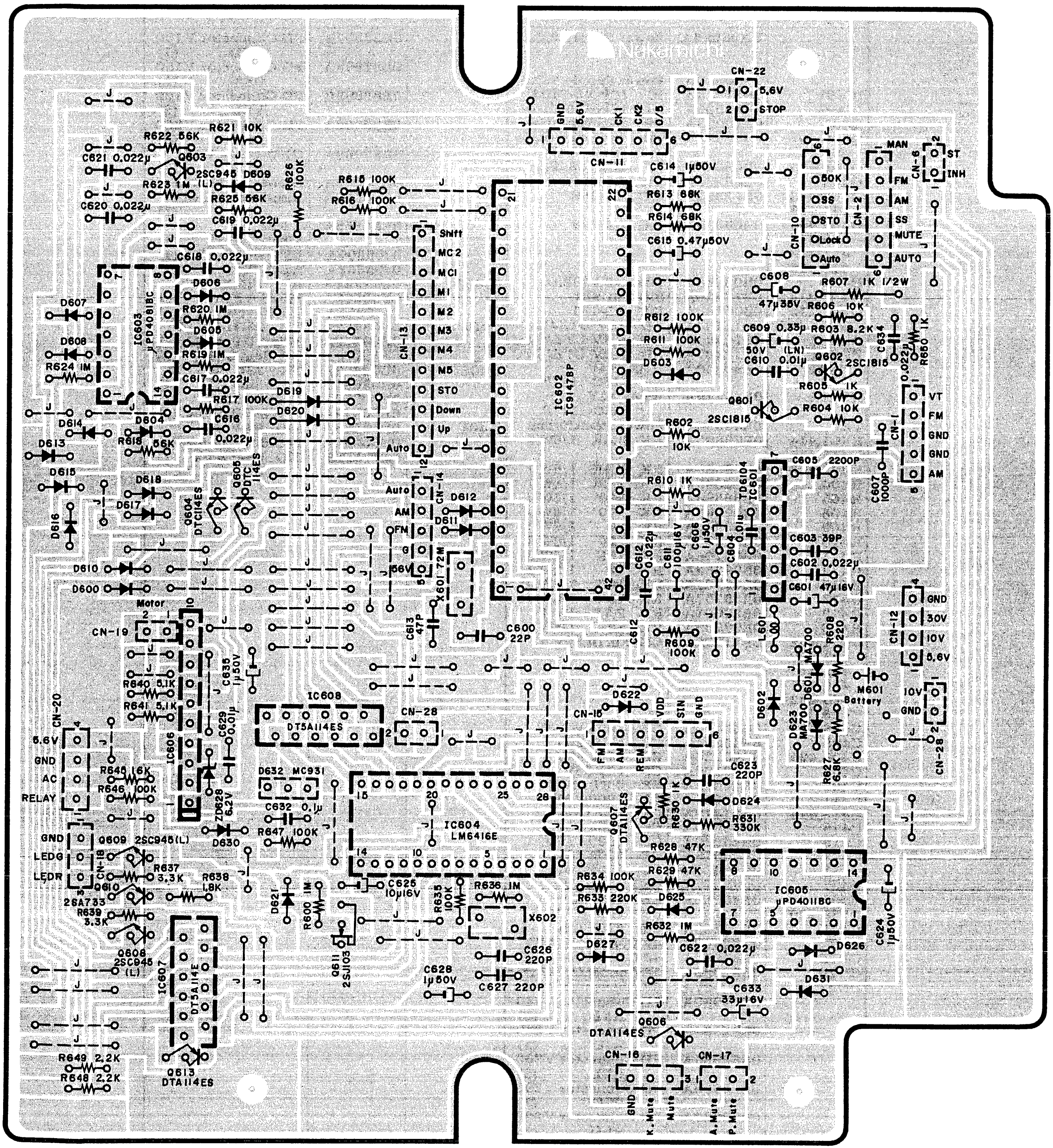

Nakamichi
CN-22
5.6V
STOP
GND
5.6V
CK1
CK2
D/S
CN-11
CN-6
ST
INH
MAN
FM
AM
SS
MUTE
AUTO
CN-10
50K
SS
STO
Lock
Auto
CN-2
R622 56K
R621 10K
C621 0.022μ
Q603
2SC945 (L)
D609
R623 1M
R625 56K
R626 100K
C620 0.022μ
C619 0.022μ
R615 100K
R616 100K
C614 1μ50V
R613 68K
R614 68K
C615 0.47μ50V
C618 0.022μ
Shift
MC2
MC1
M1
M2
M3
M4
M5
STO
Down
Up
Auto
CN-13
IC602
TC9147BP
IC603
μPD4081BC
D606
D607
R620 1M
D608
D605
R624 1M
R619 1M
C617 0.022μ
R617 100K
D619
D620
D614
D604
C616 0.022μ
R618 56K
D613
D615
D618
D617
D616
Q604
DTC114ES
Q605
DTC114ES
Auto
AM
FM
G
56V
CN-14
D612
D611
X601 7.2M
D610
D600
C613 47P
C600 22P
C608
47μ35V
R607 1K 1/2W
R606 10K
C609 0.33μ 50V (LN)
R603 8.2K
C634 0.022μ
R650 1K
C610 0.01μ
Q602
2SC1815
R605 1K
R612 100K
R611 100K
D603
Q601
2SC1815
R604 10K
R602 10K
CN-1
VT
FM
GND
GND
AM
C605 2200P
C607 1000P
R610 1K
TD6104
IC601
C612 0.022μ
C611 100μ16V
C606 1μ50V
C604 0.01μ
C603 39P
C602 0.022μ
C601 47μ16V
L601
R609 100K
MA700
D601
R608 220
CN-12
GND
30V
10V
5.6V
Motor
CN-19
C635 1μ50V
R640 5.1K
R641 5.1K
C629 0.01μ
IC606
CN-20
5.6V
GND
AC
RELAY
R645 16K
R646 100K
ZD628 6.2V
D630
IC608
DT5A114ES
CN-28
D622
CN-15
VDD
SIN
GND
FM
AM
REM
D602
D623
MA700
M601
Battery
R627 6.8K
10V
GND
CN-28
D632 MC931
C632 0.1μ
R647 100K
IC604
LM6416E
C623 220P
D624
R630 1K
R631 330K
Q607
DTA114ES
GND
LEDG
LEDR
CN-18
Q609 2SC945(L)
R637 3.3K
Q610
2SA733
R638 1.8K
R639 3.3K
Q608
2SC945 (L)
D621
R600 1M
C625 10μ16V
R635 100K
R636 1M
X602
R634 100K
R633 220K
R628 47K
R629 47K
D625
IC605
μPD4011BC
C624 1μ50V
Q611
2SJ103
C626 220P
C628 1μ50V
C627 220P
D627
R632 1M
C622 0.022μ
D626
D631
C633 33μ16V
IC607
DT5A114E
R649 2.2K
R648 2.2K
Q613
DTA114ES
Q606
DTA114ES
CN-16
CN-17
GND
K. Mute
Mute
A. Mute
P. Mute

Fig. 3.14

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | **BA06610A** | **Logic P.C.B. Ass'y** |
| | 0B60439A | Logic P.C.B. |
| IC601 | 0B11159A | IC TD6104 |
| IC602 | 0B11161A | IC TC9147BP |
| IC603 | 0B06219A | IC μPD4081BC |
| IC604 | 0B11279A | IC LM6416E |
| IC605 | 0B06178A | IC μPD4011BC |
| IC606 | 0B11250A | IC LB1645N |
| IC607,608 | 0B11334A | IC DT5A114E |
| Q601,602 | 0B10088A | TR 2SC1815L (GR) |
| Q603,608 609 | 0B01872A | TR 2SC945L (P,Q) |
| Q604,605 | 0B10068A | TR DTC114ES |
| Q606,607 613 | 0B10058A | TR DTA114ES |
| Q610 | 0B06013A | TR 2SA733 (P,Q) |
| Q611 | 0B10211A | FET 2SJ103 (GR,BL) |
| D600 602-618 621,622 624,625 626,627 630,631 | 0B06398A | SiD 1SS176 (26) |
| D601,623 | 0B12363A | SiD MA700 |
| D619,620 | 0B06181A | SiD 1SS53 |
| D632 | 0B12420A | SiD MC931 |
| ZD628 | 0B12437A | ZD 6.2V UTZJ6.2C |
| L601 | 0B51239A | Micro Coil LAL02TA220K |
| X601 | 0B92006A | Crystal 7.2MHz FYX-TE725S17 |
| X602 | 0B02307A | Resonator 800kHz KBR800H |
| M601 | 0B90241A | Lithium Battery 3V CR2330-1GV5 |
| R600,619 620,623 624,632 636 | 0B09749A | RK 1M 1/6W J |
| R602,604 606,621 | 0B09701A | RK 10K 1/6W J |
| R603 | 0B09699A | RK 8.2K 1/6W J |
| R605,610 630,650 | 0B09677A | RK 1K 1/6W J |
| R607 | 0B24114A | RF 1K 1/2W J |
| R608 | 0B09661A | RK 220 1/6W J |
| R609,611 612,615 616,617 626,634 635,646 647 | 0B09725A | RK 100K 1/6W J |
| R613,614 | 0B09721A | RK 68K 1/6W J |
| R618,622 625 | 0B09719A | RK 56K 1/6W J |
| R627 | 0B09697A | RK 6.8K 1/6W J |
| R628,629 | 0B09717A | RK 47K 1/6W J |
| R631 | 0B09737A | RK 330K 1/6W J |
| R633 | 0B09733A | RK 220K 1/6W J |
| R637,639 | 0B09689A | RK 3.3K 1/6W J |
| R638 | 0B09683A | RK 1.8K 1/6W J |
| R640,641 | 0B09694A | RK 5.1K 1/6W J |
| R645 | 0B09706A | RK 16K 1/6W J |
| R648,649 | 0B09685A | RK 2.2K 1/6W J |
| C600 | 0B41708A | CC 22P 50V J |
| C601 | 0B01403A | CE 47μ 16V |
| C602,612 616-621 634 | 0B41787A | CC 0.022μ 25V Z (9) |
| C603 | 0B41187A | CC 39P 50V J |
| C604,629 | 0B41553A | CC 0.01μ 25V Z |
| C605 | 0B09586A | CC 2200P 50V K |
| C606,614 624,628 635 | 0B01405A | CE 1μ 50V |
| C607 | 0B09288A | CC 1000P 50V K |
| C608 | 0B40103A | CE 47μ 35V |
| C609 | 0B09327A | CE 0.33μ 50V (LN) |
| C610,632 | 0B41298A | CMM 0.1μ 50V J |
| C611 | 0B01400A | CE 100μ 16V |
| C613 | 0B41709A | CC 47P 50V J |
| C615 | 0B40111A | CE 0.47μ 50V |
| C622 | 0B41290A | CM 0.022μ 50V J |
| C623 | 0B41278A | CM 2200P 50V J |
| C625 | 0B01412A | CE 10μ 16V |
| C626,627 | 0B41734A | CC 220P 50V J |
| C633 | 0B40076A | CE 33μ 16V |
| CN1 | 0B81238A | 5P-T Post YEL |
| CN2 | 0B81242A | 6P-T Post YEL |
| CN6 | 0B81226A | 2P-T Post YEL |
| CN10 | 0B81241A | 6P-T Post RED |
| CN11 | 0B81239A | 6P-T Post WHT |
| CN12 | 0B81231A | 4P-T Post WHT |
| CN13 | 0B81263A | 12P-T Post WHT |
| CN14 | 0B81235A | 5P-T Post WHT |
| CN15 | 0B81240A | 6P-T Post BLK |
| CN16 | 0B81230A | 3P-T Post YEL |
| CN17 | 0B81223A | 2P-T post WHT |
| CN18 | 0B81229A | 3P-T Post RED |
| CN19 | 0B81225A | 2P-T Post RED |
| CN20 | 0B81233A | 4P-T Post RED |
| CN22 | 0B81224A | 2P-T Post BLK |
| CN28 | 0B82979A | 2P Connector |

### 3.15. Display P.C.B. Ass'y

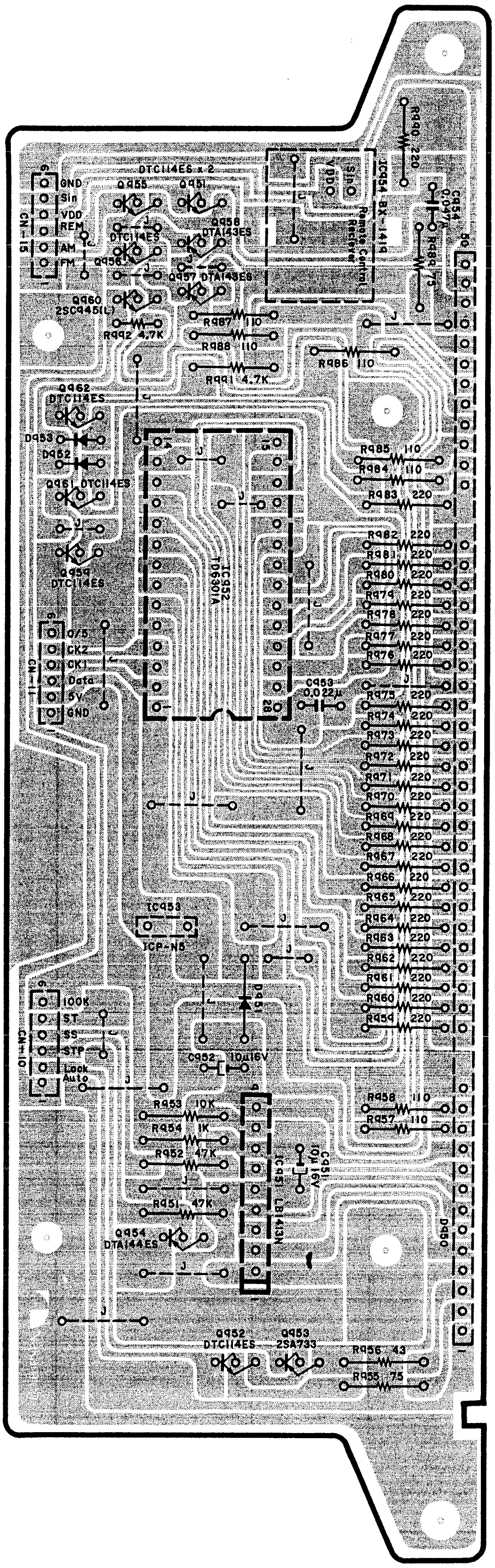

DTC114ES x 2
GND
Sin
VDD
REM
AM
FM
CN-15
Q955
Q951
Q958
DTA143ES
DTC114ES
Q956
Q957 DTA143ES
Q960
2SC945(L)
R992 4.7K
R987 110
R988 110
R991 4.7K
R986 110
IC954 BX-1419
Remote Control Receiver
VDD
Sin
R990 220
C954 0.047μ
R989 75
Q962
DTC114ES
D953
D952
Q961 DTC114ES
Q959
DTC114ES
IC952
TD6301A
R985 110
R984 110
R983 220
R982 220
R981 220
R980 220
R979 220
R978 220
R977 220
R976 220
R975 220
R974 220
R973 220
R972 220
R971 220
R970 220
R969 220
R968 220
R967 220
R966 220
R965 220
R964 220
R963 220
R962 220
R961 220
R960 220
R959 220
C953 0.022μ
28
O/S
CK2
CK1
Data
5V
GND
CN-11
IC953
ICP-N5
D951
100K
ST
SS
STP
Lock
Auto
CN-10
C952 10μ16V
R958 110
R957 110
R953 10K
R954 1K
R952 47K
R951 47K
IC951 LB1413N
C951 10μ16V
Q954
DTA144ES
D950
Q952
DTC114ES
Q953
2SA733
R956 43
R955 75
J

Fig. 3.15

| Schematic Ref. No. | Part No. | Description |
|---|---|---|
| | **BA06646A** | **Display P.C.B. Ass'y** |
| | 0B60441A | Display P.C.B. |
| IC951 | 0B11244A | IC LB1413N |
| IC952 | 0B11160A | IC TD6301A |
| IC953 | 0B11248A | IC ICP-N5-T104 |
| IC954 | 0B19005A | IC BX-1419 |
| Q951,952 955,956 | 0B10068A | TR DTC114ES |
| Q953 | 0B06013A | TR 2SA733 (P,Q) |
| Q954 | 0B10053A | TR DTA144ES |
| Q957,958 | 0B10060A | TR DTA143ES |
| Q959,961 962 | 0B10068A | TR DTC114ES |
| Q960 | 0B01872A | TR 2SC945L (P,Q) |
| D950 | 0B12414A | Display SL7823-03 |
| D951 | 0B06181A | SiD 1SS53 |
| D952,953 | 0B06398A | SiD 1SS176 |
| R951,952 | 0B05641A | RK 47K 1/4W J |
| R953 | 0B01888A | RK 10K 1/4W J |
| R954 | 0B01857A | RK 1K 1/4W J |
| R955,989 | 0B05959A | RK 75 1/4W J |
| R956 | 0B20415A | RK 43 1/4W J |
| R957,958 984-988 | 0B20416A | RK 110 1/4W J (7) |
| R959-983 990 | 0B01933A | RK 220 1/4W J (26) |
| R991 | 0B01846A | RK 4.7K 1/4W J |
| R992 | 0B09693A | RK 4.7K 1/6W J |
| C951,952 | 0B40009A | CE 10μ 16V |
| C953 | 0B41554A | CC 0.022μ 25V Z |
| C954 | 0B41555A | CC 0.047μ 25V Z |
| CN10 | 0B82950A | 6P Connector RED |
| CN11 | 0B82951A | 6P Connector WHT |
| CN15 | 0B82955A | 6P Connector BLK |
| | 0E00846A | BT3x8 ⊕Pan (2) |

## 4. SCHEMATIC DIAGRAMS

### 4.1. Amplifier Section

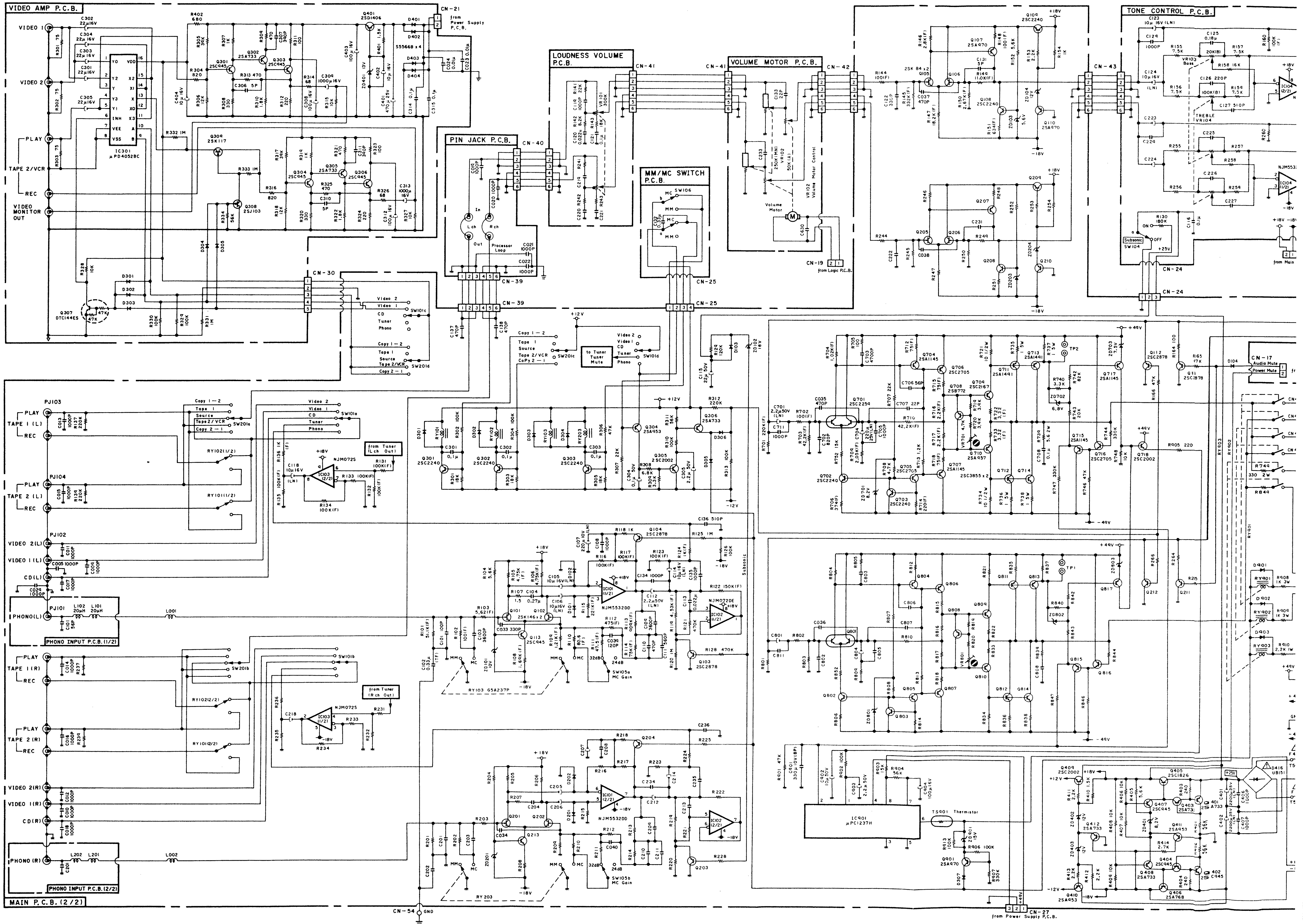

VIDEO AMP P.C.B.
VIDEO 1
VIDEO 2
PLAY
TAPE 2/VCR
REC
VIDEO MONITOR OUT
IC301 μPD4052BC
CN-21 from Power Supply P.C.B.
CN-30
LOUDNESS VOLUME P.C.B.
CN-41
VOLUME MOTOR P.C.B.
CN-42
CN-43
TONE CONTROL P.C.B.
PIN JACK P.C.B.
CN-40
CN-39
MM/MC SWITCH P.C.B.
SW106
CN-25
Volume Motor
CN-19 from Logic P.C.B.
CN-24
SW104 Subsonic
PJ103
TAPE 1 (L)
PJ104
TAPE 2 (L)
PJ102
VIDEO 2 (L)
VIDEO 1 (L)
CD (L)
PJ101
PHONO (L)
PHONO INPUT P.C.B. (1/2)
TAPE 1 (R)
TAPE 2 (R)
VIDEO 2 (R)
VIDEO 1 (R)
CD (R)
PHONO (R)
PHONO INPUT P.C.B. (2/2)
MAIN P.C.B. (2/2)
from Tuner (L ch Out)
from Tuner (R ch Out)
to Tuner Tuner Mute
IC101 NJM5532DD
IC102 NJM072DE
IC103 NJM072S
IC104
IC901 μPC1237H
TS901 Thermistor
SW105a MC Gain
SW105b MC Gain
RY103 G5A237P
RY203
CN-17 Audio Mute Power Mute
CN-54 GND
CN-27 from Power Supply P.C.B.

Fig. 4.1

Notes: 1. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise
2. 2SA733, 2SA608SP, 2SA1048 and 2SA1175 are inte
3. 2SC945, 2SC536SP, 2SC2458 and 2SC2785 are inte

0/24)

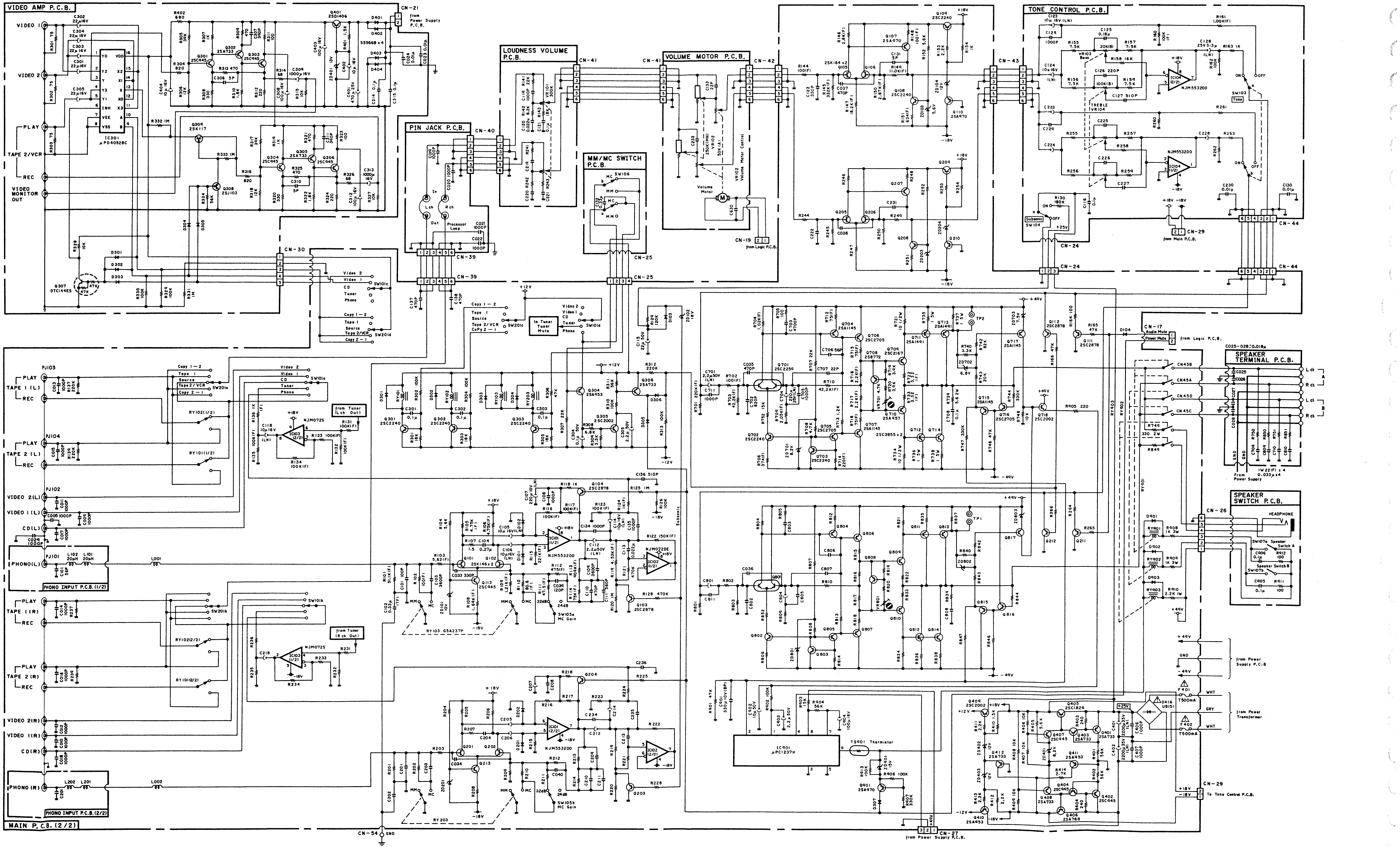

VIDEO AMP P.C.B.
LOUDNESS VOLUME P.C.B.
VOLUME MOTOR P.C.B.
TONE CONTROL P.C.B.
PIN JACK P.C.B.
MM/MC SWITCH P.C.B.
SPEAKER TERMINAL P.C.B.
SPEAKER SWITCH P.C.B.
PHONO INPUT P.C.B. (1/2)
PHONO INPUT P.C.B. (2/2)
MAIN P.C.B. (2/2)
VIDEO 1
VIDEO 2
PLAY
TAPE 2/VCR
REC
VIDEO MONITOR OUT
TAPE 1 (L)
TAPE 2 (L)
VIDEO 2(L)
VIDEO 1 (L)
CD(L)
PHONO(L)
TAPE 1 (R)
TAPE 2 (R)
VIDEO 2(R)
VIDEO 1(R)
CD(R)
PHONO (R)
IC301 μPD4052BC
IC101 NJM553200
IC102 NJM072DE
IC103 NJM072S
IC104 NJM553200
IC401 μPC1237H
CN-21 from Power Supply P.C.B.
CN-19 from Logic P.C.B.
CN-17 from Logic P.C.B.
CN-29 from Main P.C.B.
CN-29 To Tone Control P.C.B.
CN-27 from Power Supply P.C.B.
CN-54 GND
from Power Supply P.C.B
from Power Transformer
HEADPHONE
Volume Motor
TS401 Thermistor

Fig. 4.1

Notes: 1. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
2. 2SA733, 2SA608SP, 2SA1048 and 2SA1175 are interchangeable with each other.
3. 2SC945, 2SC536SP, 2SC2458 and 2SC2785 are interchangeable with each other.

## 4.2. Tuner and Power Supply Section

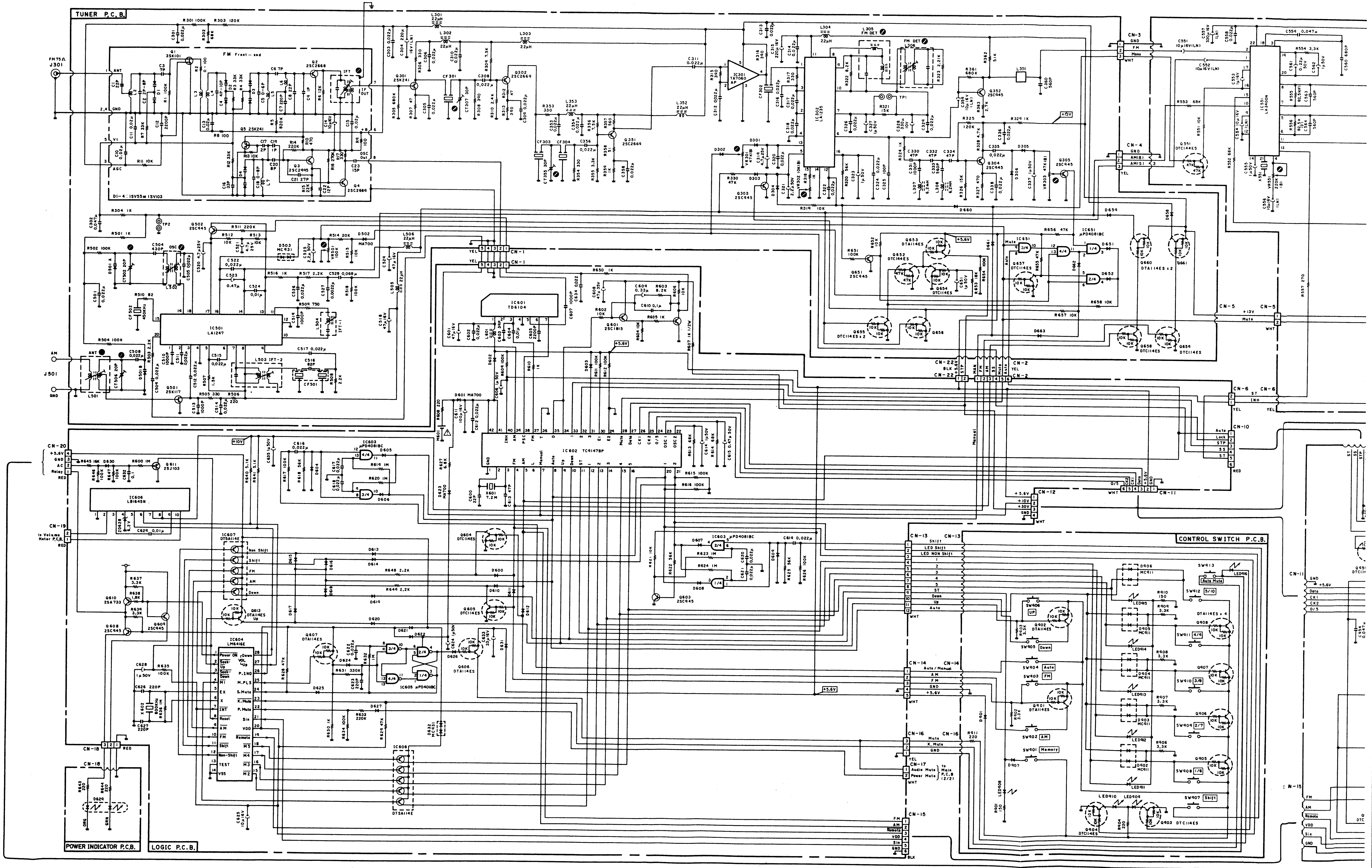
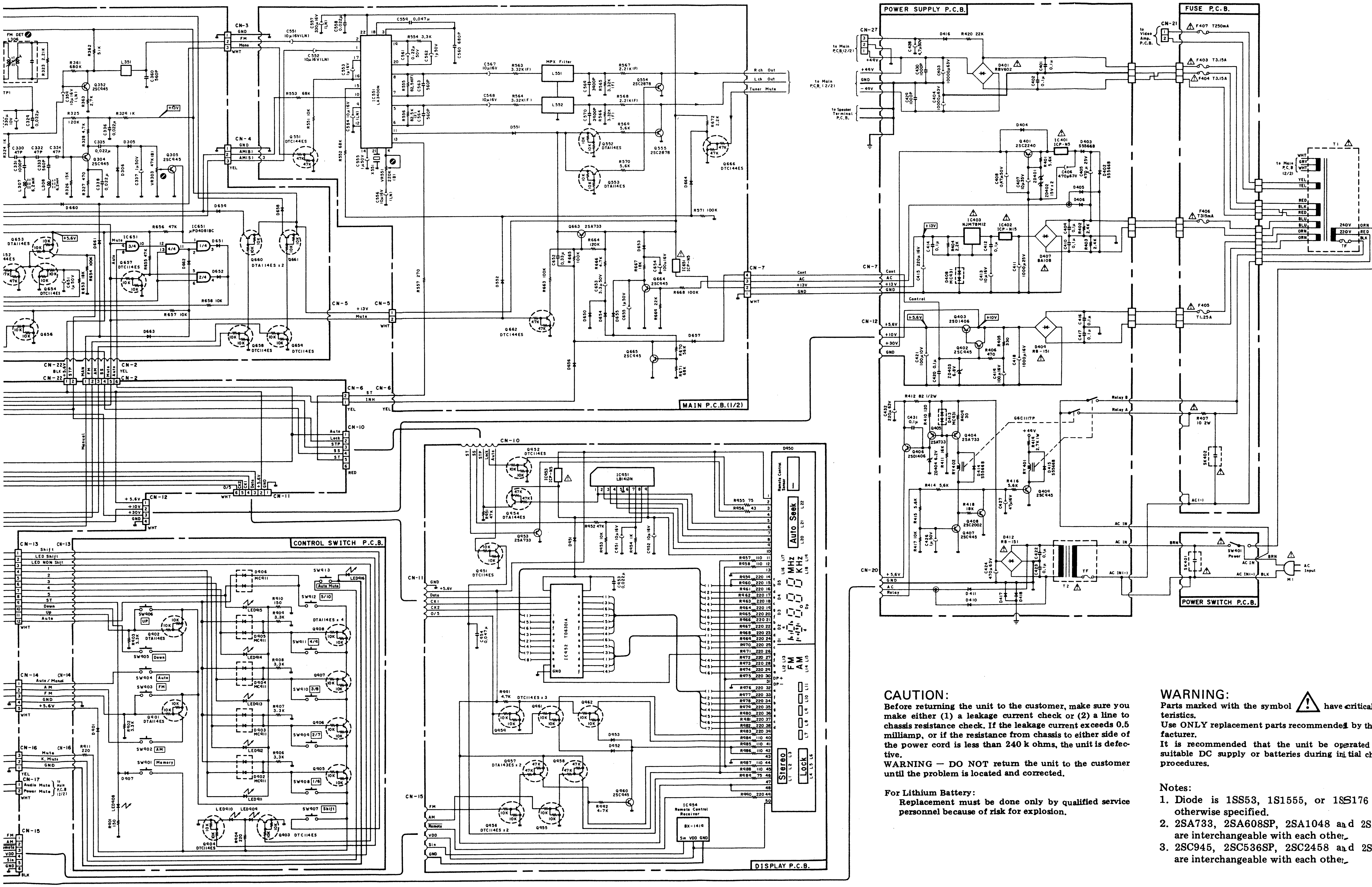

TUNER P.C.B.
FM 75Ω J301
FM Front-end
Q1 3SK101
Q2 2SC2668
Q3 2SC2495
Q4 2SC2669
Q5 2SK241
D1-4: 1SV55 or 1SV103
Q301 2SK241
Q302 2SC2669
IC301 TA7060AP
IC302 LA1235
Q351 2SC2669
L305 FM DET
TP1
TP2
Q352 2SC945
Q304 2SC945
Q305 2SC945
Q303 2SC945
IC551 LA3410N
CN-3
CN-4
CN-5
CN-6
AM J501
GND
L501
Q501 2SK117
Q502 2SC945
IC501 LA1247
CF502 450KHz
L503 IFT-2
CF501
L502
D503 MC931
D502 MA700
CN-1
IC601 TD6104
Q601 2SC1815
IC602 TC9147BP
X601 7.2M
IC651 μPD4081BC
Q651 2SC945
Q652 DTC114ES
Q653 DTA114ES
Q654 DTC114ES
Q655 DTC114ES x 2
Q656
Q657 DTC114ES
Q658 DTC114ES
Q659 DTC114ES
Q660 DTA114ES x 2
Q661
CN-2
CN-22
CN-10
CN-11
CN-12
CN-20
CN-19
to Volume Meter P.C.B.
Q611 2SJ103
IC606 LB1645N
IC603 μPD4081BC
IC607 DTSA114E
Non Shift
Shift
FM
AM
Down
Up
Q610 2SA733
Q608 2SC945
Q609 2SC945
Q613 DTA114ES
IC604 LM6416E
IC605 μPD4011BC
Q607 DTA114ES
Q606 DTC114ES
Q604 DTC114ES
Q605 DTC114ES
Q603 2SC945
IC608 DTSA114E
CN-18
POWER INDICATOR P.C.B.
LOGIC P.C.B.
CONTROL SWITCH P.C.B.
CN-13
CN-14
CN-15
CN-16
CN-17 to Main P.C.B (2/2)
Audio Mute
Power Mute
SW413 Auto Mute
SW412 5/10
SW411 4/9
SW410 3/8
SW409 2/7
SW408 1/6
SW407 Shift
SW406 Up
SW405 Down
SW404 Auto
SW403 FM
SW402 AM
SW401 Memory
Q901 DTA114ES
Q902 DTA114ES
Q903 DTC114ES
Q904 DTC114ES
Q905
Q906
Q907
Q908 DTA114ES x 4
D901
D902 MC911
D903 MC911
D904 MC911
D905 MC911
D906 MC911
LED908
LED909
LED910
LED911
LED912
LED913
LED914
LED915
LED916
WHT
YEL
RED
BLK

Fig. 4.2


MAIN P.C.B.(1/2)
POWER SUPPLY P.C.B.
FUSE P.C.B.
POWER SWITCH P.C.B.
CONTROL SWITCH P.C.B.
DISPLAY P.C.B.
IC551 LA3400N
MPX Filter
IC651 μPD4081BC
IC401 ICP-N5
IC402 ICP-N15
IC403 NJM78M12
IC951 LB1413N
IC952 TD6301A
IC954 Remote Control Receiver
BX-1419
D950
Remote Control Sensor
Auto Seek
MHz
KHz
FM
AM
Stereo
Lock
Rch Out
Lch Out
Tuner Mute
to Main P.C.B (2/2)
to Speaker Terminal P.C.B.
to Video Amp. P.C.B.
Relay B
Relay A
AC Input
240V
220V
T1
T2
SW401 Power
CN-3
CN-4
CN-5
CN-6
CN-7
CN-10
CN-11
CN-12
CN-13
CN-14
CN-15
CN-16
CN-17
CN-20
CN-21
CN-22
CN-27

## CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamp, or if the resistance from chassis to either side of the power cord is less than 240 k ohms, the unit is defective.

WARNING — DO NOT return the unit to the customer until the problem is located and corrected.

For Lithium Battery:

Replacement must be done only by qualified service personnel because of risk for explosion.

## WARNING:

Parts marked with the symbol ⚠ have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.

It is recommended that the unit be operated from a suitable DC supply or batteries during initial check-out procedures.

Notes:

1. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
2. 2SA733, 2SA608SP, 2SA1048 and 2SA1175 are interchangeable with each other.
3. 2SC945, 2SC536SP, 2SC2458 and 2SC2785 are interchangeable with each other.

## 5. WIRING DIAGRAM

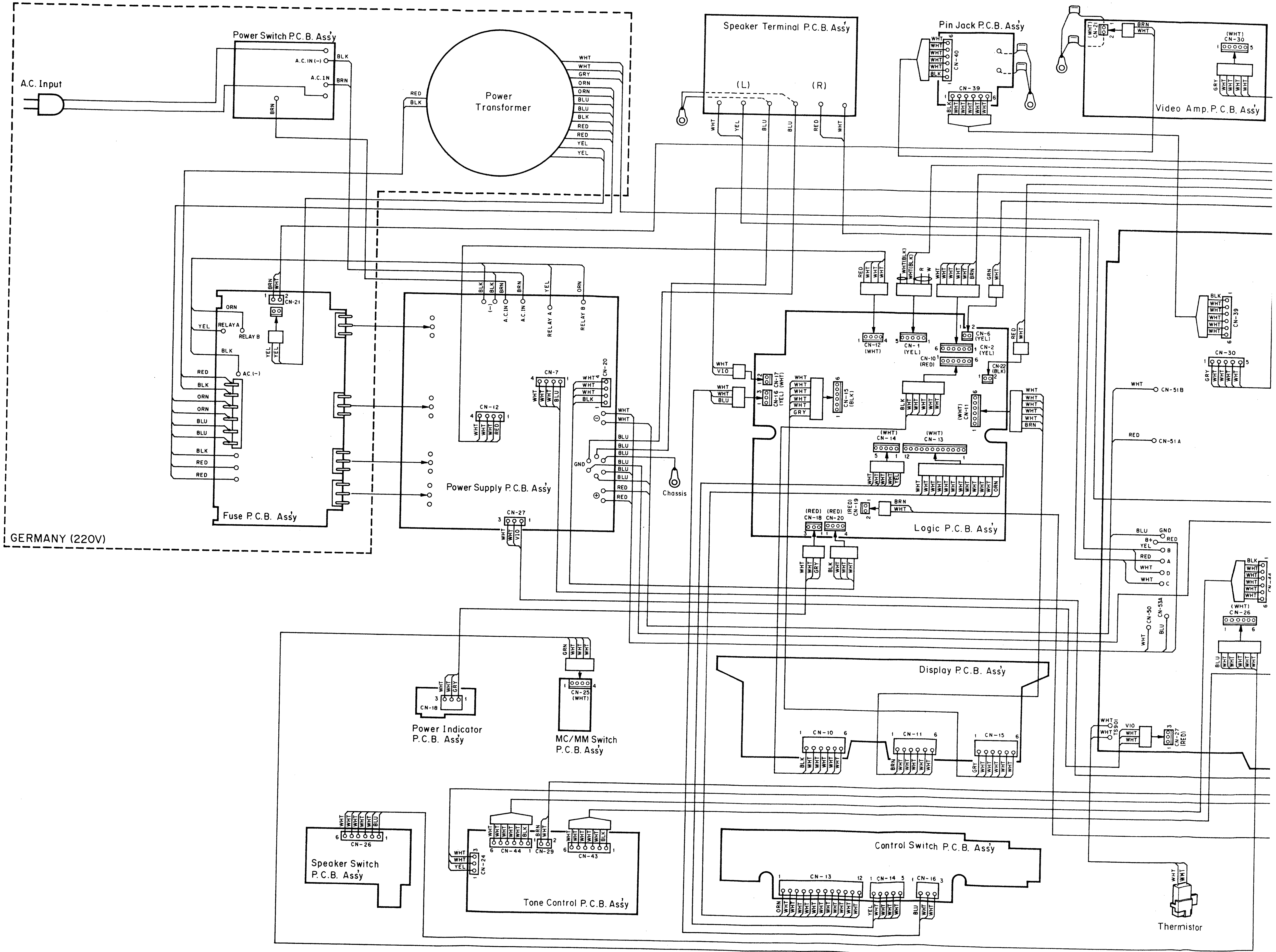

A.C. Input
Power Switch P.C.B. Ass'y
A.C. IN (−)
A.C. IN
Power Transformer
GERMANY (220V)
Fuse P.C.B. Ass'y
RELAY A
RELAY B
A.C. (−)
CN-21
Power Supply P.C.B. Ass'y
CN-7
CN-12
CN-20
CN-27
GND
Chassis
Speaker Terminal P.C.B. Ass'y
(L)
(R)
Pin Jack P.C.B. Ass'y
CN-40
CN-39
Video Amp. P.C.B. Ass'y
CN-30
Logic P.C.B. Ass'y
CN-1
CN-2
CN-6
CN-10
CN-11
CN-13
CN-14
CN-15
CN-16
CN-17
CN-18
CN-19
CN-22
CN-51B
CN-51A
CN-50
CN-53A
CN-26
CN-27
Display P.C.B. Ass'y
Power Indicator P.C.B. Ass'y
MC/MM Switch P.C.B. Ass'y
CN-25
Speaker Switch P.C.B. Ass'y
Tone Control P.C.B. Ass'y
CN-24
CN-29
CN-43
CN-44
Control Switch P.C.B. Ass'y
Thermistor
TS901

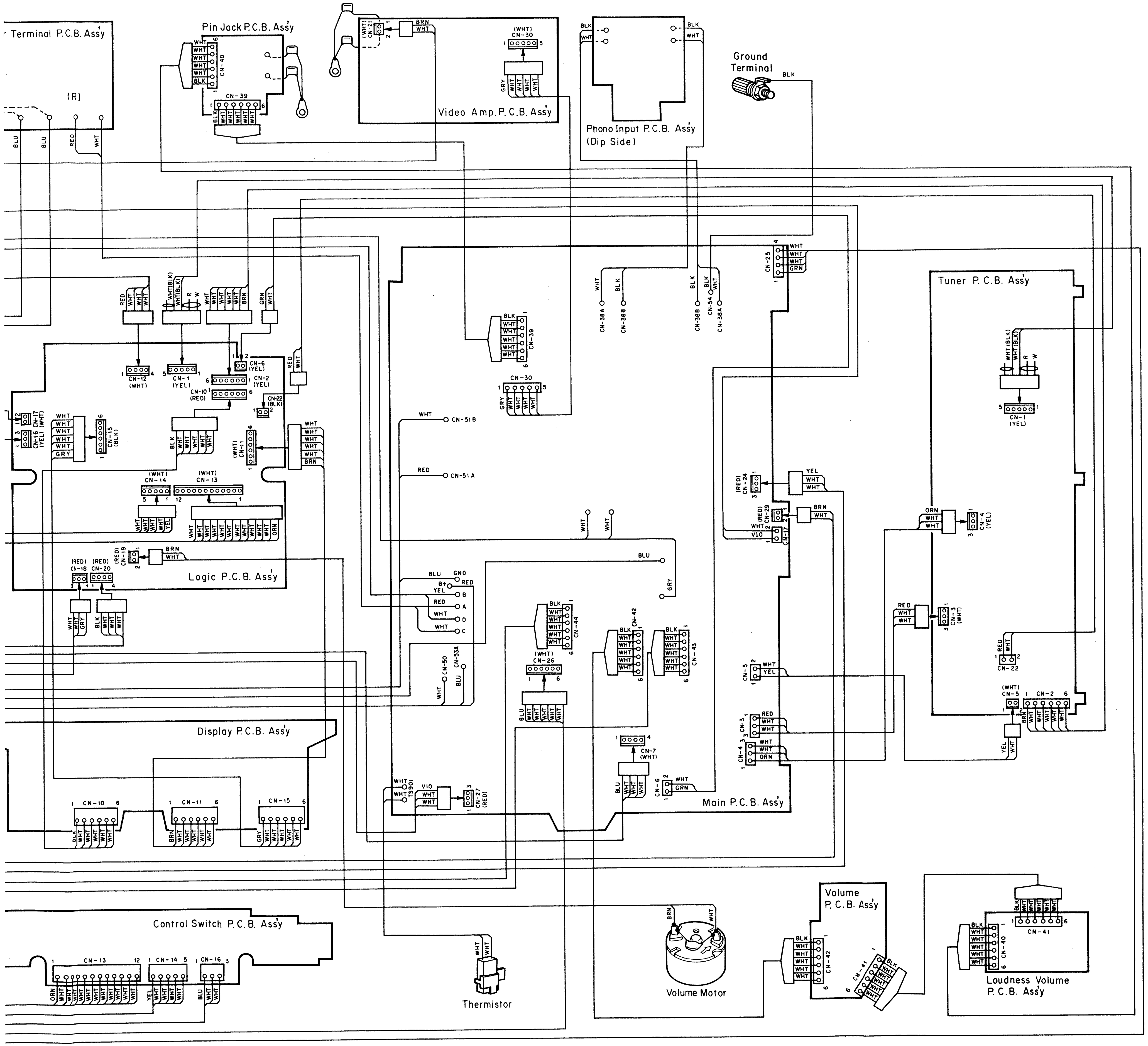
Fig. 5

Notes:

1. Table of wire colors

| | |
|---|---|
| BRN – Brown | BLU – Blue |
| RED – Red | VIO – Violet |
| ORN – Orange | GRY – Gray |
| YEL – Yellow | WHT – White |
| GRN – Green | BLK – Black |

2. Component side view of the P.C.B. is illustrated unless otherwise specified.


Terminal P.C.B. Ass'y
(R)
Pin Jack P.C.B. Ass'y
CN-40
CN-39
Video Amp. P.C.B. Ass'y
CN-21
CN-30
Phono Input P.C.B. Ass'y
(Dip Side)
Ground Terminal
CN-38A
CN-38B
CN-54
CN-25
Tuner P.C.B. Ass'y
CN-1 (YEL)
CN-4 (YEL)
CN-3 (WHT)
CN-22
CN-5
CN-2
CN-12 (WHT)
CN-1 (YEL)
CN-6 (YEL)
CN-2 (YEL)
CN-10 (RED)
CN-22 (BLK)
CN-17 (WHT)
CN-16 (YEL)
CN-15 (BLK)
CN-11 (WHT)
CN-14 (WHT)
CN-13 (WHT)
CN-19 (RED)
CN-18 (RED)
CN-20 (RED)
Logic P.C.B. Ass'y
CN-51B
CN-51A
GND
B+
A
B
C
D
CN-50
CN-53A
CN-44
CN-42
CN-43
CN-26 (WHT)
CN-24 (RED)
CN-29 (RED)
CN-17
V10
CN-5
CN-3
CN-4
CN-7 (WHT)
CN-6
TS901
CN-27 (RED)
Main P.C.B. Ass'y
Display P.C.B. Ass'y
CN-10
CN-11
CN-15
Control Switch P.C.B. Ass'y
CN-13
CN-14
CN-16
Thermistor
Volume Motor
Volume P.C.B. Ass'y
CN-42
CN-41
Loudness Volume P.C.B. Ass'y
CN-40
CN-41
BLK
WHT
RED
BLU
GRY
BRN
YEL
GRN
ORN

## 6. SPECIFICATIONS

### Power Amplifier Section

Note: Unless noted otherwise specifications are in accordance with IHF-A-202 measured from any high-level input (CD/VIDEO/TAPE) to the speaker output.

| | |
|---|---|
| Continuous Average Output Power | 60 watts per channel into 8 ohms, both channels driven, 20—20,000 Hz at no greater than 0.1% THD |
| Dynamic Output Power | 85 watts per channel into 8 ohms<br>125 watts per channel into 4 ohms |
| Dynamic Head Room (8 ohms) | 1.5 dB |
| Power Bandwidth | 5—30,000 Hz |
| Frequency Response | 20—20,000 Hz; +0, −1 dB<br>5—45,000 Hz; +0, −3 dB |
| Signal to Noise Ratio (A-WTD, Input Shorted) | Better than 105 dB re Rated Power<br>Better than 85 dB (IHF-A-202) |
| Total Harmonic Distortion (8 ohms, Rated Power, 20 Hz — 20 kHz) | Less than 0.1% |
| Intermodulation Distortion (8 ohms, Rated Power, 60 Hz:7 kHz, 4:1) | Less than 0.1% |
| Headphone Rated Output (40 ohms) | 140 mW |
| Output Current Capability | 25A peak per channel |

### Preamplifier Section

Note: Unless noted otherwise specifications are in accordance with IHF-A-202. Except for Sensitivity, S/N, Tone and Loudness characteristics (which are measured to the speaker outputs), measurements are made from the specified input to Rec. Out.

| | |
|---|---|
| Sensitivity: (for rated Output) | |
| Phono MC (Gain: 32/24 dB) | 60/160 μV |
| Phono MM | 2.5 mV |
| CD/Tape | 200 mV |
| Video | 200 mV |
| Sensitivity: (for 1-watt output, IHF-A-202) | |
| Phono MC (Gain: 32/24 dB) | 7.8/21 μV |
| Phono MM | 0.32 mV |
| CD/Tape | 26 mV |
| Video | 26 mV |
| Input Impedance | |
| Phono MC | 100 ohms |
| Phono MM | 47 kohms |
| CD/Tape | 20 kohms |
| Video | 20 kohms |
| Maximum Input Level (1 kHz) | |
| Phono MC (Gain: 32/24 dB) | 3/8 mV |
| Phono MM | 140 mV |
| Record Output Level/Impedance | 200 mV/1 kohms |
| Total Harmonic Distortion (1 kHz, to Rec Out, at 1 V) | |
| Phono MC | Less than 0.003% (either gain) |
| Phono MM | Less than 0.002% |
| RIAA Deviation | |
| Phono MC | 30—20,000 Hz ±0.5 dB |
| Phono MM | 30—20,000 Hz ±0.5 dB |
| Signal to Noise Ratio (to speaker output, IHF-A-202) | |
| Phono MC with 32 dB Gain | Better than 71 dB |
| 24 dB Gain | Better than 70 dB |
| Phono MM | Better than 78 dB |

## Tone Controls

| | |
|---|---|
| Bass | 20 Hz, ±10 dB |
| Treble | 20 kHz, ±10 dB |
| Variable Loudness (re maximum attenuation: —40 dB at 1 kHz) | 20 Hz, +20 dB; 20 kHz, +6 dB |
| Subsonic Filter (Phono Only) | Cutoff Frequency 20 Hz, —12 dB/octave |

## Tuner Section

### [FM Section]

Note: All RF levels in microvolts given re 300-ohm antenna input. Modulation: Mono 60%, Stereo Pilot 9%, Stereo Audio Signal 51%. All measurements made at Rec. Out Jack.

| | |
|---|---|
| Frequency Range | 87.50—108.00 MHz in 50 kHz steps |
| IHF Usable Sensitivity (Mono) | 11 dBf/1.9 μV |
| 50-dB Quieting Sensitivity | |
| Mono | 23.0 dBf/7.7 μV |
| Stereo | 43.0 dBf/77.4 μV |
| Signal to Noise Ratio at 65 dBf | |
| Mono | Better than 72 dB |
| Stereo | Better than 67 dB |
| Muting Threshold | 30 dBf/17.3 μV |
| Frequency Response | 20—15,000 Hz ±1 dB |
| Total Harmonic Distotion (1 kHz) | |
| Mono | Less than 0.20% |
| Stereo | Less than 0.25% |
| Capture Ratio | 2.0 dB |
| Alternate Channel Selectivity | 70 dB (±300 kHz) |
| Stereo Separation at 100 Hz | Better than 43 dB |
| at 1 kHz | Better than 43 dB |
| at 10 kHz | Better than 27 dB |
| Spurious Response Rejection | Better than 90 dB |
| Image Rejection | Better than 75 dB |
| IF Rejection | Better than 80 dB |
| AM Suppression | Better than 60 dB |

### [AM Section]

Note: Modulation — 400 Hz, 30%

| | |
|---|---|
| Frequency Range | 522—1,611 kHz in 9 kHz steps |
| Sensitivity | 53 dBμ/m |
| Signal to Noise Ratio at 90 dBμ/m | Better than 52 dB |
| Total Harmonic Distortion at 90 dBμ/m | Less than 0.3% |
| Selectivity | Better than 20 dB (±9 kHz) |

## General

| | |
|---|---|
| Power Source | 220 V AC, 50/60 Hz |
| Power Consumption | 350 watts max. |
| Dimensions | 430 (W) x 100 (H) x 370 (D) mm<br>16-15/16 (W) x 3-15/16 (H) x 14-9/16 (D) inches |
| Approximate Weight | 9.8 kg, 21 lbs. 10 oz. |

- Specifications and design are subject to change for further improvement without notice.

# 8. BLOCK DIAGRAMS

## 8.1. Tuner Section

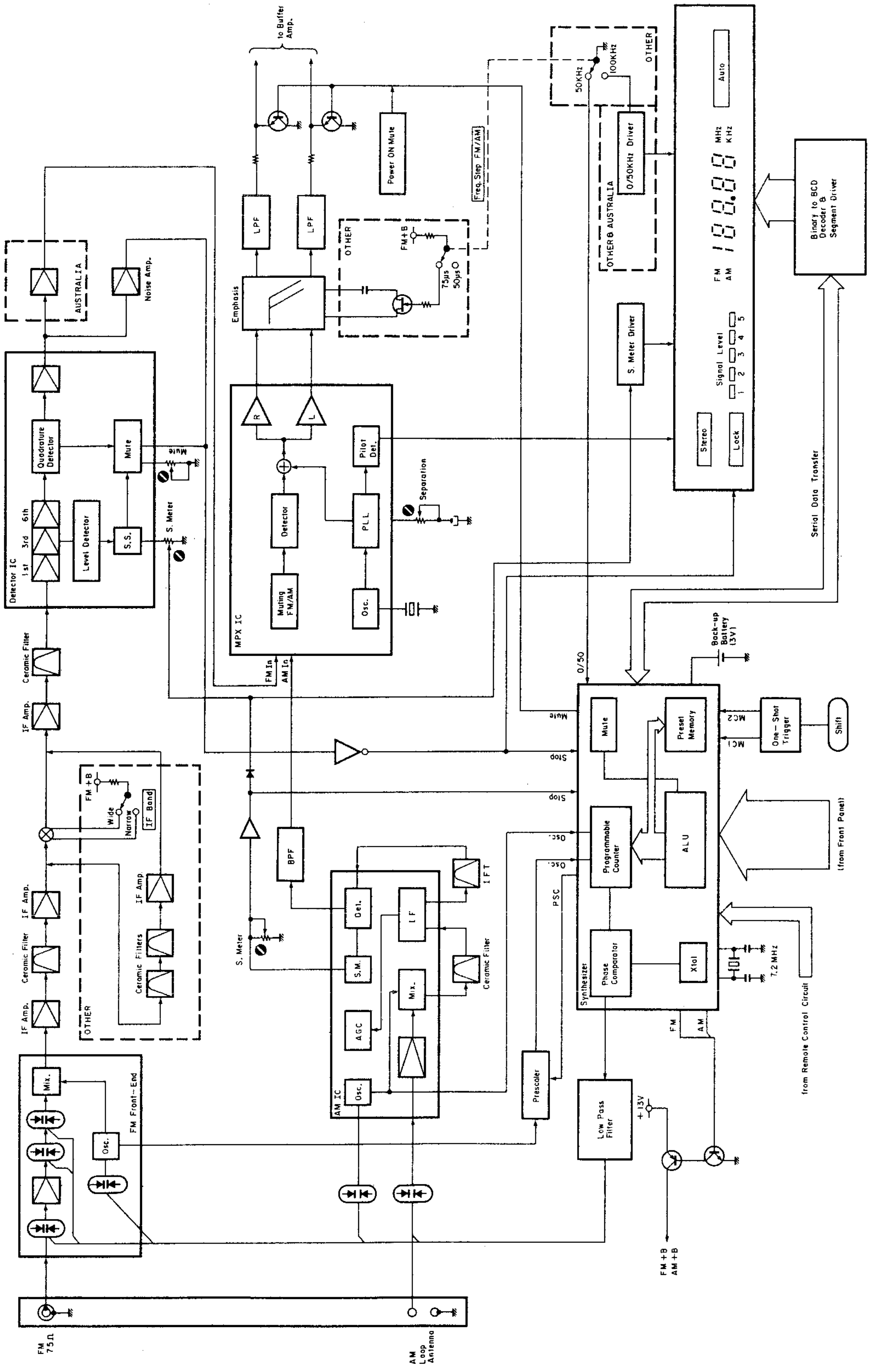

to Buffer Amp.
Power ON Mute
Freq. Step FM/AM
50KHz
100KHz
OTHER
0/50KHz Driver
OTHER & AUSTRALIA
Auto
MHz
KHz
FM
AM
Signal Level
1
2
3
4
5
Stereo
Lock
Binary to BCD Decoder & Segment Driver
Serial Data Transfer
S. Meter Driver
LPF
LPF
Emphasis
FM+B
75μs
50μs
OTHER
AUSTRALIA
Noise Amp.
Detector IC
1st
3rd
6th
Level Detector
S.S.
Quadrature Detector
Mute
Mute
S. Meter
MPX IC
Muting FM/AM
Detector
R
L
PLL
Pilot Det.
Osc.
Separation
FM In
AM In
Ceramic Filter
IF Amp.
IF Amp.
Ceramic Filter
IF Amp.
FM+B
Wide
Narrow
IF Band
IF Amp
Ceramic Filters
OTHER
FM Front-End
Mix.
Osc.
AM IC
Osc.
AGC
S.M.
Det.
IF
Mix.
IFT
Ceramic Filter
BPF
S. Meter
Prescaler
PSC
Osc.
Osc.
Stop
Stop
Mute
0/50
Back-up Battery (3V)
Synthesizer
Mute
Preset Memory
Programmable Counter
ALU
Phase Comparator
Xtal
7.2 MHz
MC2
MC1
One-Shot Trigger
Shift
(from Front Panel)
from Remote Control Circuit
FM
AM
Low Pass Filter
+13V
FM+B
AM+B
FM 75Ω
AM Loop Antenna

Fig. 8.1

## 8.2. Amplifier Section

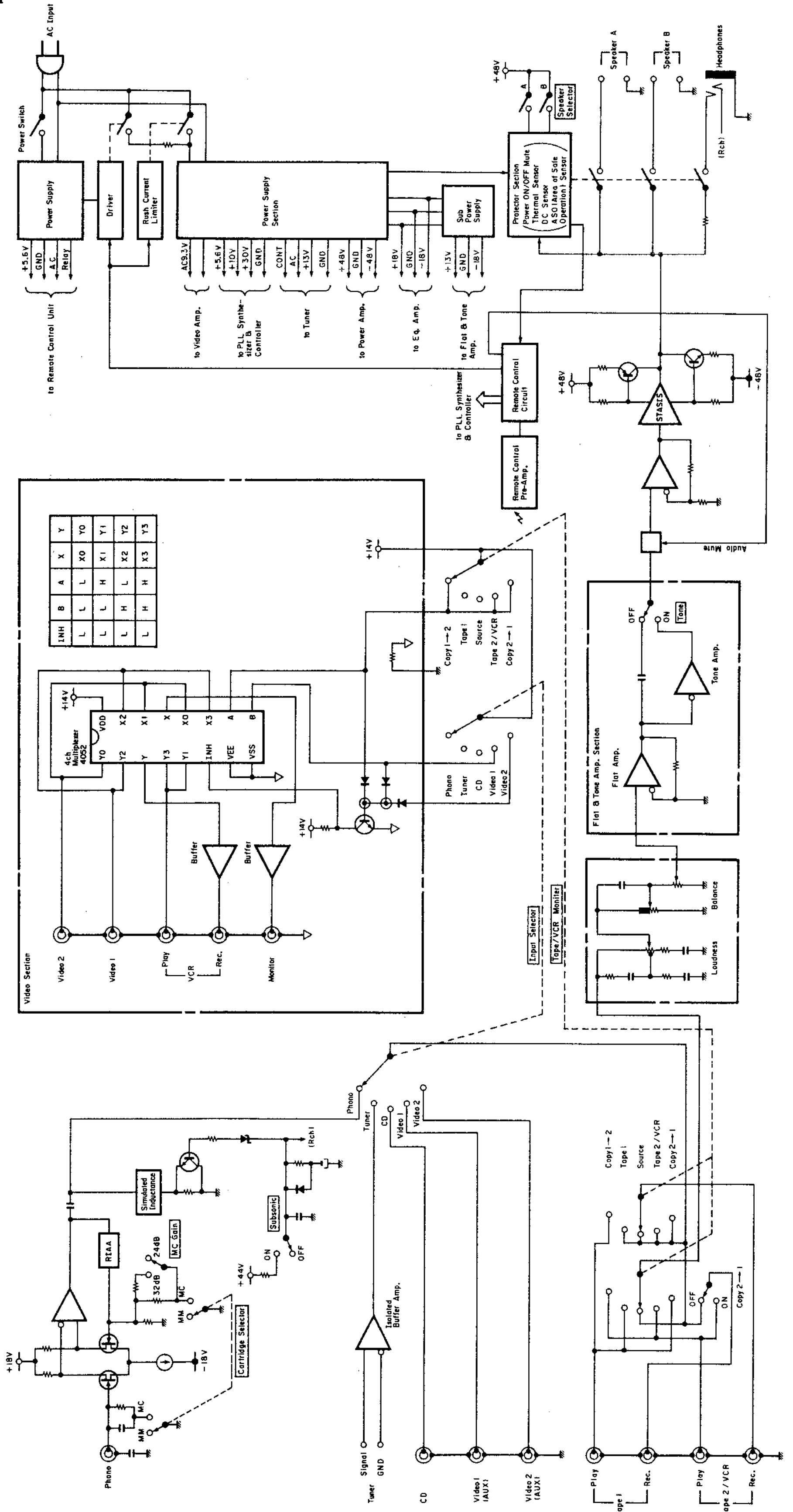

AC Input
Power Switch
Power Supply
Driver
Rush Current Limiter
Power Supply Section
Sub Power Supply
Protector Section
Power ON/OFF Mute
Thermal Sensor
DC Sensor
ASO (Area of Safe Operation) Sensor
Speaker Selector
Speaker A
Speaker B
Headphones
(Rch)
+48V
-48V
+5.6V
GND
AC
Relay
to Remote Control Unit
AC9.3V
+10V
+30V
CONT
+13V
-18V
+18V
to Video Amp.
to PLL Synthesizer & Controller
to Tuner
to Power Amp.
to Eq. Amp.
to Flat & Tone Amp.
Remote Control Circuit
Remote Control Pre-Amp.
to PLL Synthesizer & Controller
STASIS
Audio Mute
Flat & Tone Amp. Section
Flat Amp.
Tone Amp.
Tone
OFF
ON
Balance
Loudness
Input Selector
Tape/VCR Monitor
Video Section
INH
B
A
X
Y
L
H
X0
X1
X2
X3
Y0
Y1
Y2
Y3
4ch Multiplexer 4052
VDD
VEE
VSS
+14V
Buffer
Copy 1→2
Tape 1
Source
Tape 2/VCR
Copy 2→1
Phono
Tuner
CD
Video 1
Video 2
VCR
Play
Rec.
Monitor
Simulated Inductance
Subsonic
RIAA
MC Gain
24dB
32dB
MC
MM
Cartridge Selector
+44V
Isolated Buffer Amp.
Signal
Video 1 (AUX)
Video 2 (AUX)
Tape 1
Tape 2/VCR

Fig. 8.2

## 9. SPECIFICATIONS

### Power Amplifier Section

Note: Unless noted otherwise specifications are in accordance with IHF-A-202 measured from any high-level input (CD/VIDEO/TAPE) to the speaker output.

| | |
|---|---|
| **Continuous Average Output Power** | **60 watts per channel into 8 ohms, both channels driven, 20—20,000 Hz at no greater than 0.1% THD** |
| Dynamic Output Power | 85 watts per channel into 8 ohms<br>125 watts per channel into 4 ohms |
| Dynamic Head Room (8 ohms) | 1.5 dB |
| Power Bandwidth | 5—60,000 Hz |
| Frequency Response | 20—20,000 Hz; +0, —0.5 dB<br>5—75,000 Hz; +0, —3 dB |
| Signal to Noise Ratio (A-WTD, Input Shorted) | Better than 105 dB re Rated Power<br>Better than 85 dB (IHF-A-202) |
| Total Harmonic Distortion (8 ohms, Rated Power, 20 Hz — 20 kHz) | Less than 0.1% |
| Intermodulation Distortion (8 ohms, Rated Power, 60 Hz:7 kHz, 4:1) | Less than 0.1% |
| Headphone Rated Output (40 ohms) | 140 mW |
| Output Current Capability | 25A peak per channel |

### Preamplifier Section

Note: Unless noted otherwise specifications are in accordance with IHF-A-202. Except for Sensitivity, S/N, Tone and Loudness characteristics (which are measured to the speaker outputs), measurements are made from the specified input to Rec. Out.

| | |
|---|---|
| Sensitivity: (for rated Output) | |
| Phono MC (Gain: 32/24 dB) | 60/160 µV |
| Phono MM | 2.5 mV |
| CD/Tape | 200 mV |
| Video | 200 mV |
| Sensitivity: (for 1-watt output per IHF-A-202) | |
| Phono MC (Gain:32/24 dB) | 7.8/21 µV |
| Phono MM | 0.32 mV |
| CD/Tape | 26 mV |
| Video | 26 mV |
| Input Impedance | |
| Phono MC | 100 ohms |
| Phono MM | 47 kohms |
| CD/Tape | 20 kohms |
| Video | 20 kohms |
| Maximum Input Level (1 kHz) | |
| Phono MC (Gain: 32/24 dB) | 3/8 mV |
| Phono MM | 140 mV |
| Record Output Level/ Impedance | 200 mV/1 kohms |
| Total Harmonic Distortion (1 kHz, to Rec Out, at 1 V) | |
| Phono MC | Less than 0.003% (either gain) |
| Phono MM | Less than 0.002% |
| RIAA Deviation | |
| Phono MC | 30—20,000 Hz ±0.5 dB |
| Phono MM | 30—20,000 Hz ±0.5 dB |
| Signal to Noise Ratio (to speaker output per IHF-A-202) | |
| Phono MC with 32 dB Gain | Better than 73 dB |
| 24 dB Gain | Better than 72 dB |
| Phono MM | Better than 80 dB |

| | |
|---|---|
| Tone Controls | |
| Bass | 20 Hz, ±10 dB |
| Treble | 20 kHz, ±10 dB |
| Variable Loudness (re maximum attenuation: —40 dB at 1 kHz) | 20 Hz, +20 dB; 20 kHz, +6 dB |
| Subsonic Filter (Phono Only) | Cutoff Frequency 20 Hz, —12 dB/octave |

## Tuner Section

### (1) SR-4A & SR-4 (Canada & Other (see Note))

Note: Selector switch settings for Other Model
Frequency Step FM/AM: 100 kHz/10 kHz, De-emphasis: 75 μs,
IF Band: Wide

### [FM Section]

Note: All RF levels in microvolts given re 300-ohm antenna input. Modulation: Mono 100%, Stereo Pilot 9%, Stereo Audio Signal 91%. All measurements made at Rec. Out Jack.

| | |
|---|---|
| Frequency Range | 87.5—108.0 MHz in 100 kHz steps |
| IHF Usable Sensitivity (Mono) | 11 dBf/1.9 μV |
| 50-dB Quieting Sensitivity | |
| Mono | 14.7 dBf/3.0 μV |
| Stereo | 37.5 dBf/41.1 μV |
| Signal to Noise Ratio at 65 dBf | |
| Mono | Better than 82 dB |
| Stereo | Better than 76 dB |
| Muting Threshold | 30 dBf/17.3 μV |
| Frequency Response | 20—15,000 Hz ±1 dB |
| Total Harmonic Distortion (1 kHz) | |
| Mono | Less than 0.05% |
| Stereo | Less than 0.07% |
| Capture Ratio | 2.0 dB |
| Alternate Channel Selectivity | 55 dB (±400 kHz) |
| Stereo Separation at 100 Hz | Better than 46 dB |
| at 1 kHz | Better than 50 dB |
| at 10 kHz | Better than 46 dB |
| Spurious Response Rejection | Better than 90 dB |
| Image Rejection | Better than 75 dB |
| IF Rejection | Better than 80 dB |
| AM Suppression | Better than 60 dB |

### [AM Section]

Note: Modulation — 400 Hz, 30%

| | |
|---|---|
| Frequency Range | 520—1,710 kHz in 10 kHz steps |
| Sensitivity | 53 dBμ/m |
| Signal to Noise Ratio at 90 dBμ/m | Better than 52 dB |
| Total Harmonic Distortion at 90 dBμ/m | Less than 0.3% |
| Selectivity | Better than 20 dB (±10 kHz) |

### (2) SR-4 (Australia & Other (see Note))

Note: Selector switch settings for Other Model
Frequency Step FM/AM: 50 kHz/9 kHz, De-emphasis: 50 μs,
IF Band: Narrow

### [FM Section]

Note: All RF levels in microvolts given re 300-ohm antenna input. Modulation: Mono 60%, Stereo Pilot 9%, Stereo Audio Signal 51%. All measurements made at Rec. Out Jack.

| | |
|---|---|
| Frequency Range | 87.5—108.00 MHz in 50 kHz steps |
| IHF Usable Sensitivity (Mono) | 11 dBf/1.9 μV |
| 50-dB Quieting Sensitivity | |
| Mono | 21.0 dBf/6.1 μV |
| Stereo | 42.0 dBf/69.0 μV |
| Signal to Noise Ratio at 65 dBf | |
| Mono | Better than 74 dB (for Australia), Better than 77 dB (for Other) |
| Stereo | Better than 69 dB (for Australia), Better than 71 dB (for Other) |
| Muting Threshold | 30 dBf/17.3 μV |
| Frequency Response | 20—15,000 Hz ±1 dB |
| Total Harmonic Distortion (1 kHz) | |
| Mono | Less than 0.12% (for Australia), Less than 0.15% (for Other) |
| Stereo | Less than 0.20% (for Australia), Less than 0.25% (for Other) |
| Capture Ratio | 2.0 dB |
| Alternate Channel Selectivity | 70 dB (±300 kHz) |
| Stereo Separation at 100 Hz | Better than 43 dB |
| at 1 kHz | Better than 43 dB |
| at 10 kHz | Better than 37 dB |
| Spurious Response Rejection | Better than 90 dB |
| Image Rejection | Better than 75 dB |
| IF Rejection | Better than 80 dB |
| AM Suppression | Better than 60 dB |

**[AM Section]**

Note: Modulation — 400 Hz, 30%

| | |
|---|---|
| Frequency Range | 522—1,611 kHz in 9 kHz steps |
| Sensitivity | 53 dBμ/m |
| Signal to Noise Ratio at 90 dBμ/m | Better than 52 dB |
| Total Harmonic Distortion at 90 dBμ/m | Less than 0.3% |
| Selectivity | Better than 20 dB (±9 kHz) |

**General**

| | |
|---|---|
| Power Source | 110, 120, 220 or 240 V AC, 50/60 Hz (According to country of sale) |
| Power Consumption | 350 watts max. |
| Convenience Outlets | Switched: 2, Unswitched: 1 (for U.S.A., Canada & Other only) |
| Dimensions | 430 (W) x 100 (H) x 370 (D) mm<br>16-15/16 (W) x 3-15/16 (H) x 14-9/16 (D) inches |
| Approximate Weight | 9.8 kg, 21 lbs. 10 oz. |

- Specifications and design are subject to change for further improvement without notice.
- STASIS manufactured under license from Threshold Corporation.
- STASIS is a trademark of Threshold Corporation.

## Service Manual

# Nakamichi SR-4, SR-4A

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